COMMERCE AMERICA

U.S. Department of Commerce / March 28, 1977

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SOCIAL SCIENCES

ECONOMIC POLICY MAKING

The New Commerce Role

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Newsmemo

A second look at the energy prospects of the world's industrialized nations contains some chilling revisions. The OECD group of 24 countries made an assessment in 1975 of its energy requirements for 1985. A recent reassessment has raised the figures for net oil imports by 69 percent. Two significant revisions had to be made by the OECD officials. First, consumer demand for energy products in the face of higher prices turned out to be less elastic than assumed. Second, investment in production of additional energy resources, which was assumed to respond almost immediately to higher prices, did not do so. The OECD warns: "Stagnant economic growth and high inflation have tended to mask the gravity of the energy problem and to sap the political will to resolve it."

The U.S. Trade Center in London wound up its year's schedule on Mars. The head of NASA's Viking mission to the red planet discussed instrumentation techniques with British scientists and lab technicians attending the final trade show of the Center's Bicentennial year. He helped draw 1,175 prospective buyers of U.S. scientific and industrial lab instruments. Through the year, which was a difficult one for the British economy, 886 U.S. firms used the Center in major exhibitions or single company promotions. Results: $12.6 million in floor sales, $231.4 million in 12-month projected sales, 18,000 leads to customers, 154 sales representation agreements either concluded or under negotiation.

Why Must We Export? For the tenth year, students in the high schools in the New York City area will compete in an essay contest keyed to this subject. The sponsor is the New York District Export Council of the Commerce Department. Others assisting with the project are the Foreign Credit Interchange Bureau-NACM, the Foreign Commerce Club of New York, World Trade Club of New York, International Executives Association and the International Longshoremen's Association.

In business discussions today, is it still proper to address a German executive as "Herr Doktor Braun" or "Herr Professor Schmidt?" Not really necessary, but still courteous, advises the German airline Lufthansa in two new promotional booklets, "Germany As a Business Partner" and "Organizing Business Relations with the Federal Republic of Germany." Among many other tips are that the initials "ppa" as a signature addendum indicate a person with authority to negotiate for management, and "i.V." designate one with negotiating power in a particular area.

The import penetration of the U.S. auto market continues to be surprisingly strong. For the first two months of 1977, imports were 17.6 percent of total sales, compared with a 13.7 percent proportion last year and 20.8 percent in 1975 (the all-time high). The penetration rate is higher than auto market analysts had expected, in view of domestic makers' difficulties in promoting small car sales. Japanese producers, who took the import lead from German companies in 1975, now have a commanding 68 percent position.

The Soviet Union was the leading consumer of machine tools in 1976, according to a McGraw-Hill world recap of the industry. The U.S., with $1.9 billion in consumption, was second to the USSR's $2.3 billion. West Germany was the leading producer, at $2.4 billion, followed by the U.S., $2.3 billion, USSR, $1.9 billion, and Japan, $1.1 billion. West Germany led all exporters with $1.6 billion in shipments. The U.S. was a distant second at $598 million.

Proposed flammability standards for upholstered furniture have met strong opposition. Only six of 16 Presidentially-appointed advisors to the Consumer Product Safety Commission favor any type of standard. Last May the Commerce Department evaluated the Commission's proposed mandatory standards as costing about $1.1 billion annually. The industry contends that the benefits of compliance would not be worth the cost. Instead it urges a modified, voluntary standard and a consumer education program warning of the dangers of smoking near upholstered furniture.

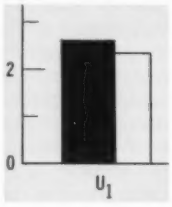
COMMERCE AMERICA

CONTENTS **VOL. II, No. 7, March 28, 1977**

4

Commerce's Role In Economic Policy Making

Secretary Kreps explains the additional responsibility that the Department of Commerce now has in helping make policy as well as serving up statistics, which it has done for years.



2

Economic Highlights

Problems involved in presenting a statistical picture of unemployment begin with definitions and are compounded by seasonal changes; many rates are needed to give a well-rounded picture.

7 **Energy Digest**

8 **Domestic Business Report**

U.S. patent applications level off; foreign rise—Mid-decade census initiated to keep data current—Barriers retard growth of telecommunications—U.S. business plans $134.6 billion capital spending for 1977—Solar radiation network to aid energy conservation—Satellite will help census research—Calendar of business events.

15 **International Commerce Report**

Supreme Court decision on inventory taxes has traders searching for relief—U.S. share of world's manufactured exports declines moderately—Latest Washington Official Trade Briefs—Reports from Commerce-sponsored trade missions, seminars, exhibitions—Economic summaries from Colombia, Denmark, Algeria, Liberia, Pakistan, Bangladesh and Burma—Calendar for World Traders—New international business reports reviewed—Licensing, investment, sales and construction opportunities from many countries.

COVER: The new role for the Department of Commerce in helping to form the nation's economic policy is explained by Commerce Secretary Juanita M. Kreps in the article beginning on page 4.

U.S. DEPARTMENT OF COMMERCE

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Many Different Rates Can Be Used To Depict Unemployment

This column was prepared by John W. Kendrick, Commerce Chief Economist, in collaboration with Thomas W. Kraseman.

John W. Kendrick

The official unemployment rate probably receives more attention and generates more headlines than any other single government statistic. Yet, there is not just one unemployment rate, but many, and each tells a slightly different story.

The intense focus on a single number may have led many people to believe that it is the only possible measure of unemployment and that it is accurate and complete. The detailed information released by the Bureau of Labor Statistics (BLS), however, makes it clear that there are many unemployment rates, based on the various definitions of unemployment, and that even the "official" rate can vary according to the particular method used to seasonally adjust the raw data.

The definition of unemployment used in the official rate is precise enough: it includes everyone age 16 and over who did not work during the survey week, who was available for work, and who had made an effort to find a job within the previous four weeks. Also included are persons on layoff waiting to be recalled, or those waiting to start a new job within 30 days.

The definition says nothing, however, about how seriously the unemployed need a job or whether some of those now holding part-time jobs want to work full-time, or whether some of those who want jobs are not looking (and therefore not counted as unemployed) because they feel the search is hopeless. Therefore a debate has raged between those who argue, on the one hand, that the official definition excludes many discouraged workers who ought to be counted, and on the other hand, those who say that it includes many who do not really need a job. Partly to satisfy this demand for alternatives, BLS is now presenting an array of seven different rates. (See upper panel of charts.)

In the most restricted definition, unemployment is limited to those seeking jobs for 15 weeks or longer; at the higher end, it includes not only the regularly counted unemployed, but also the discouraged unemployed, plus an allowance for the underemployed (part-time workers wanting full-time work). In the fourth quarter of last year, when the official unemployment rate was 7.9 percent, these rates ranged from 2.6 percent to 10.7 percent.

The seven alternative rates of unemployment provided by the BLS by no means exhaust the possible combinations; it has been argued, for instance, that teenagers seeking part-time jobs ought not to be included, since they are merely looking for jobs that provide "pocket money." The counter-argument is that part-time jobs help some teenagers supplement their families' income, and they may permit him or her to continue in school or college; furthermore, jobs may provide confidence and help build work habits for young people who might otherwise be tempted to commit crimes. Other considerations may apply to women with employed husbands: many married women have worked for years to help support a family but an increasing proportion are seeking independent careers.

After a definition of unemployment has been settled upon, decisions then must be made on how to present the level of unemployment in a meaningful way. The raw unemployment rate reflects both the normal seasonal swings—between summer and winter, for example—and the changes over the business cycle. Since public interest centers on the cyclical changes, the seasonal movements should be separated out.

In his monthly statement before the Joint Economic Committee of Congress, the Commissioner of Labor Statistics now presents a table showing the unemployment rate seasonally adjusted not only by the official method, but by at least eight alternative methods as well. All of these series show a declining level of unemployment in the first part of last year through May, and then a rise in the summer months. Beyond this, however, the differences are considerable. (See lower panel of charts).

The differences in level among the various unemployment rates range from .1 percentage point to .4 percentage point. In 1976, the official rate represented the top of this range in 3 months, and the bottom in 2 months. The amplitude of the fluctuations during the year also differed considerably among the series, ranging between one-half percentage point and a full percentage point; the official rate was in between, fluctuating within a range of .7 percentage point.

Seasonal adjustment factors in BLS practice are based on actual movements during the most recent nine-year period. In broad terms, the two basic techniques for seasonally adjusting unemployment data are the multiplicative and the additive. The multiplicative method assumes that unemployment changes from season to season by a given percentage, and the additive assumes that it changes by a given amount. These can be applied directly to total unemployment or to broad age-sex groups, which are then added together. The official method uses a hybrid: additive adjustment for teenagers and multiplicative for adults. The two major variations of this are the use of multiplicative factors throughout or additive factors throughout. A third variation uses multiplicative factors based on 1967-1973 experience to avoid the effects of the 1974-1975 recession. Other variations involve seasonally-adjusting unemployment by duration, by reasons for unemployment, or as the residual difference between seasonally-adjusted employment and labor force; and finally, the seasonal adjustments are applied directly to the unemployed rate itself.

Under the multiplicative system, when unemployment suddenly doubles after

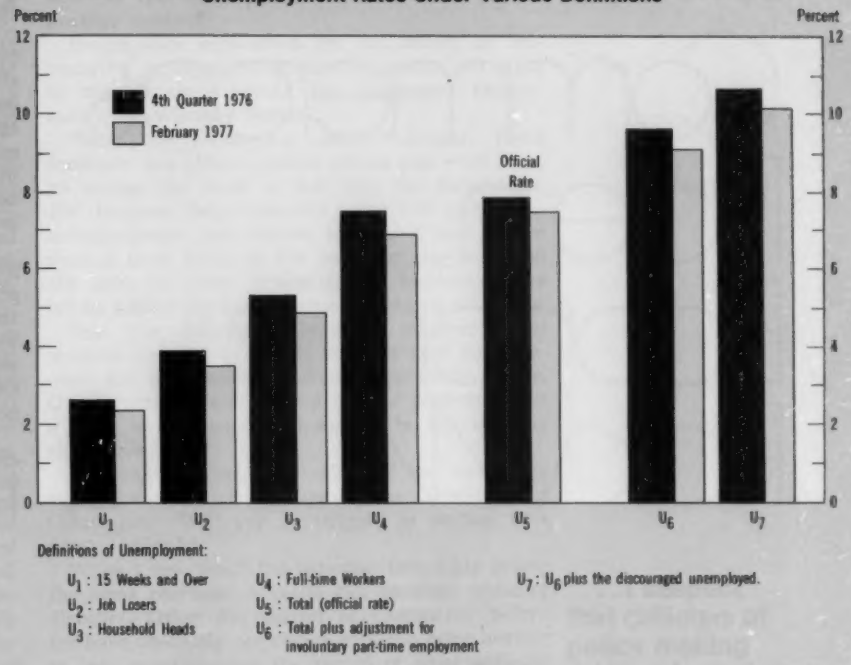
some years of stability (as in a recession) the size of the seasonal changes also tends to double (at least until, with the passage of time, the base period for computing the seasonal factors includes the period of the recession). In the additive method, on the other hand, the size of the seasonal changes does not change very much.

So long as unemployment remains fairly stable over several years, the choice of methods does not greatly matter. When a recession comes, however, the difference is critical. In this situation, the weight of logic appears to favor the additive method; for instance, the number of construction workers who cannot work in the winter because of the weather normally should not change much from year to year regardless of the stage of the business cycle. A more important source of distortion is the sudden influx of school graduates who begin to seek jobs each June; the number of these is obviously related to the size of the graduating classes. The BLS has recently corrected this particular problem by changing to the additive technique for adjusting teenage unemployment, while staying with the multiplicative method for adult unemployment.

Because of the formulas by which the seasonal factors are computed, some part of the cyclical changes unavoidably become absorbed into the seasonal factors. In this way, the sharp cyclical rise of unemployment in late 1974 and the first part of 1975 has been influencing the seasonal factors since early 1976. The officially-adjusted unemployment rate last year averaged 0.3 points higher in the second half of the year than in the first half. However, if the seasonal factors had been based on experience in the years 1967 through 1973—thereby leaving out the recession period—the increase would have been less than 0.1 point between the first and second halves of the year. This same tendency toward a lower rate early in the year and a higher rate later could be developing during 1977. The visible increase in the official rate in the latter part of last year was one of several factors shaping public opinion and public policy.

All of the vexing questions connected with the collection, computation, and adjustment of labor force, employment, and unemployment statistics are soon to be reviewed by a committee of independent experts similar to one appointed by President Kennedy in 1961. It is probable that significant improvements will result from this effort, just as they did in the early 1960s. But in any case, it is clear that the estimates will never become as accurate as desired, and that no one rate will satisfy all purposes.

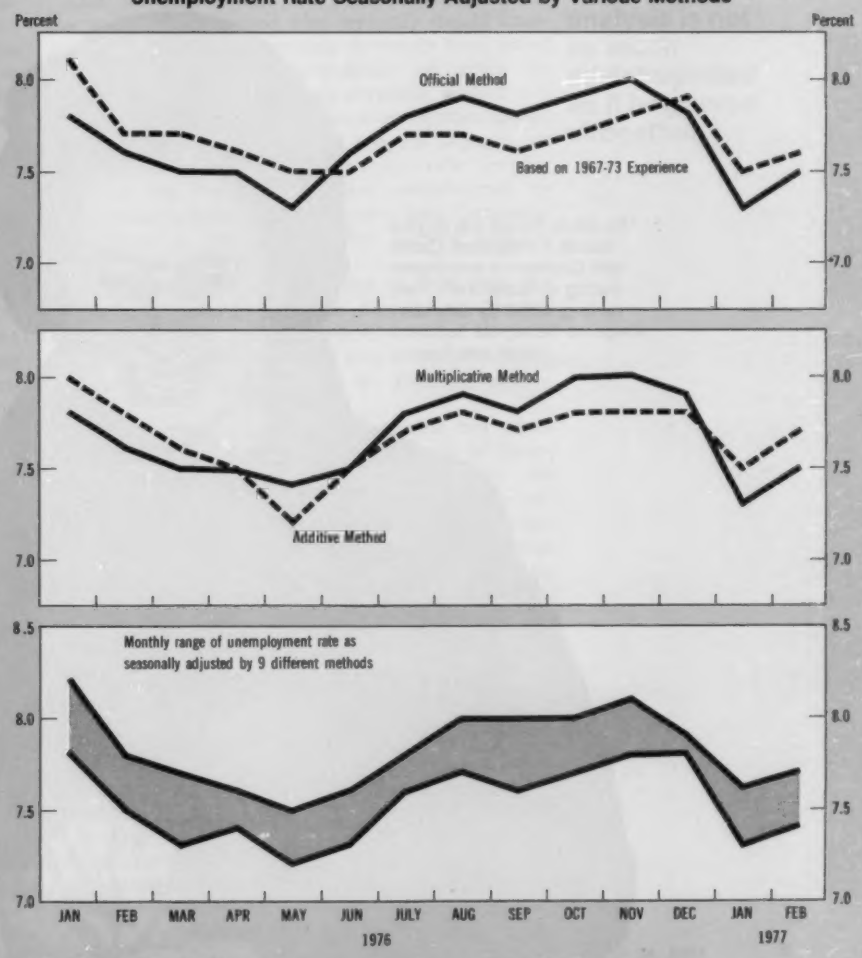
Chart 1
Unemployment Rates Under Various Definitions



Definitions of Unemployment:

U_1 : 15 Weeks and Over
U_2 : Job Losers
U_3 : Household Heads
U_4 : Full-time Workers
U_5 : Total (official rate)
U_6 : Total plus adjustment for involuntary part-time employment
U_7 : U_6 plus the discouraged unemployed.

Chart 2
Unemployment Rate Seasonally Adjusted by Various Methods



Source: Bureau of Labor Statistics

Secretary of Commerce Kreps Explains:

Commerce's Role in Economic Policy Making

Current economic policy seems to be a cumbersome beast whose limbs seem curiously uncoordinated, the front legs being prodded to move forward at a faster pace while the hind are solidly shackled by constraints. Economic policy-makers ought first, to determine the desired direction and speed of the animal, after taking into account the many diverse interests and having calculated the inevitable tradeoffs; and second, to persuade the beast to take those lumbering steps that seem to be indicated.

Given the cumbersome nature of this process—indeed, the difficulty of even describing it—many economists want no part of policy making. Indeed, they argue, that policy is best which intervenes least; the unfettered market is a far more agile, responsive creature than any alternative animal. Of course not many economists of this extreme persuasion stay long in Washington.

Yet that economic analysis that was the catechism for all of us in the days of our youth remains with us. That discipline continues to be important, for it helps to remind us that in a market economy

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In this excerpt of a recent address to the National Economists Club in Washington, Secretary of Commerce Juanita M. Kreps discusses the new role of the Department in helping to formulate U.S. economic policy.

"So many things are in your hands," President Carter told Commerce employees during a recent visit. Here he is greeted by Secretary Kreps as he arrives to speak with employees.

there are fairly narrow limits within which policy making is effective. Moreover, the textbooks which many of us wrote when we lived in that less pressured world of ideas should come often to haunt us, both when we ignore the principles that govern the marketplace and when we impute to that market process any necessary maximization of human welfare.

The role of economic analysis in the formulation of policy needs another look. In particular, we might reexamine the record to see when policy takes account of the best economic analysis, and when such analysis, though clearly understood, is set aside because of other considerations. I have no difficulty with the latter choice, incidentally. But we must be aware of the cost involved in such a set-aside and more importantly, the public must count the cost. Granted always that different interpretations may flow from any analysis, I suspect that criticism of policy making springs from the view that the analysis is not so much misinterpreted as it is ignored altogether. Whether this criticism is justified, or whether the policy adopted took primary account of, say, critical international relations, is not always clear. Nor is the cost of serving other noneconomic goals usually identified.

I dwell on this need for clarification in part because I believe the profession is not in particularly good repute in the public eye at this time, and for quite the wrong reason. Economists have failed to make clear the distinction between those problems we do not yet know how to solve, and those for which we could pose a solution, but the solution would entail a high level of costs and sacrifice. Many energy-related problems would seem to fall in the high-cost and sacrifice class, while the concurrent maintenance of zero inflation and full employment is still beyond our analytical reach.

But my primary concern is not with the image of the economist, which has often been better than was justified. John Kenneth Galbraith once pointed out that economics has never lost the title of the "dismal science" because the title has never been altogether undeserved. Rather, I think it is increasingly necessary to remind ourselves that the tools of economic analysis are not tools of great precision. Our estimates of the volume of spending generated by a change in tax policy, or the numbers of jobs created by a local public works program are the best estimates we can possibly make, drawing on past records, present talents, and future projections.

Promised too much

To the extent that we do not review past experience carefully, or assemble the best available advice from economists in and out of government, or build the projections with an eye on any new variables we can anticipate, we are remiss. But it is a mistake to expect that GNP will respond precisely as the model predicts, and a greater mistake to allow the public to expect such response. In brief, I fear that in earlier times we promised too much, and as a result a performance that was usually quite good looked as though it was far off the mark. I appreciate (Chairman of the Council of Economic Advisors) Charles Schultze's habit of couching projections in terms of ranges and his constant emphasis on the fact that "these are our best estimates." It could be called "zero-based humility," a term Meg Greenfield of *The Washington Post* used recently in another context.

Incidentally, economists are not nearly as battered by critici[illegible] another group I've come to observe since joining the Commerce Department: the Weather Service.

They, like economists, offer forecasts. These forecasts are almost always sound and when they go wrong, the fault is not with the forecasters. But because their forecasts come out daily . . . because people may choose to wear a coat or not wear a coat, to go to the beach or stay home on the basis of these forecasts, the forecasters are better known for being wrong than being scientists.

One big difference between economic and weather forecasting lies in the fact that our forecasts are not tested so often by so many people. Our forecasts aren't singled out for delivery twice a night on television, and we can be thankful for that blessing.

One question has been asked of me repeatedly since President Carter named me Secretary of Commerce: "Will you participate in setting economic policy?"

When I say "yes," the response invariably draws the same reaction: A polite but knowing smile of disbelief. Other Secretaries of Commerce before me have obviously responded with the same answer to that question—but the record of what actually happened is uneven.

". . . I suspect that criticism of policy making springs from the view that the analysis is not so much misinterpreted as it is ignored altogether."

One wonders about that record. Why has the Secretary of Commerce, who certainly should know something about the economy, so rarely been asked to participate in the formulation of policy on perhaps the most vital of all domestic issues?

Answers to such questions are sometimes rooted in history. Yet half a century ago the Department was headed by a man who, though now remembered as the President who was overwhelmed by world-wide economic collapse, came into Commerce determined to turn the Census Bureau into "a proper bureau of statistics."

He did just that, and in June of that year the Department issued the first *Survey of Current Business*. One corporation executive called its publication "the most important step in our industrial life since the inauguration of the Federal Reserve System."

Since Hoover's time the Department has often been referred to as "the Old Gray Lady of Fourteenth Street." And as was customary for old gray ladies of that time, she stayed in the kitchen. There she spent her time gathering, sifting, refining and serving up one expertly-prepared statistical dish after another, with new ones being added to the menu all the time.

She served them up to the triad and then the quadriad and then back to the triad again. She served them to the councils, the departments, the boards, the President, the Congress, and innumerable committees and agencies all over town.

But when it came to sitting down at the table with the others to use these statistics in the formulation of policy, the Old Gray Lady of Fourteenth Street was rarely invited.

Well, it is something of a relief to be out of the kitchen. With a permanent seat at the table as a full participant in the deliberations on economic policy, the Department will continue to serve up

the statistical feast, but we will also join in the deliberations. Moreover, as a member of the Executive Committee of the Economic Policy Group that will be responsible for both domestic and international economic policy, I expect to play a role in the identification of major economic problems and in devising strategies to meet them.

In doing so, one must make certain that the Economic Policy Group makes use of the data and expertise which exist in many of the Executive Departments, especially in microeconomic issues. In this respect, the Department of Commerce can make its maximum contribution to economic problem-solving.

In the past, the attention of policy-makers and of many economists has often focused on broad macroeconomic policy issues. Discussion and decisionmaking by the President's top economic advisers has focused on the outlook and the aggregate levels of federal expenditures and receipts, or on the monetary policy needed to achieve our national goals.

If this new Economic Policy Group fails to go beyond these broader economic issues, then I believe it will have failed the nation. We have come a long way since the 1960s when the fine-tuning of fiscal policy enjoyed great respect and a significant amount of success. Today, we have a greater appreciation for the structural imbalances which impede the move to sustained growth, full employment, and price stability. Note just two of these structural problems: the persistence of very high unemployment rates for some labor force groups even in periods of strong growth; and the disparities in growth that appear to be widening among regions of the country.

"... the Department will continue to serve up the statistical feast, but we will also join in the deliberations."

The Economic Policy Group has a unique opportunity to integrate the theoretical research that is available on many of these micro issues with the data and the expertise which already exist in government; and to bring the combined result to bear on policy decisions.

Documenting cold's impact

As for the particular role of the Commerce Department, it is interesting to note some recent events in which our work has been vital. Our macroeconomic input was useful, for example, in documenting the impact of the severe cold we have experienced this winter. In this instance we brought together the expertise of two of our major agencies, one in the field of science, the other economics: the National Oceanic and Atmospheric Administration, which operates the National Weather Service, and the Bureau of Economic Analysis. Their computations enabled us to provide the Economic Policy Group with an up-to-the minute assessment of the impact of the cold weather and the resulting energy shortage on the First Quarter's economic performance. We are now working to verify our preliminary findings through analyses that use input-output and regional economic models.

Further illustrations of the Department's work in macro and microeconomic analysis include estimates of maritime and oceans resources, international trade issues, regional development, the impact of technology on industrial performance, and overall economic growth. Some of these questions not only demand our immediate attention; they extend as well to long-range issues affecting the course of the economy in the decades ahead. For example, there is the long-term problem of productivity. Over the past 17 years, the United States has been lagging far behind most of the other industrialized countries in annual productivity growth. Our rate has slowed by about one-third since the mid-1960s, compared with the prior two decades. As a contributing factor to inflation, this has impeded our ability to compete with foreign producers in both the domestic and international markets.

Closely tied to the productivity problem is that of capital requirements for the future. Here our economists will be studying a range of questions having to do with current consumption versus saving and investment for higher consumption and social benefits in the future.

More modest promises

On a recent visit with Commerce employees, President Carter said, "so many things are in your hands." He named responsibility for the nation's technical standards, the collection and analysis of economic information, protection of the environment, concern for the oceans, economic development, long-range projections on weather, development of the nation's maritime structure. All of these functions relate to the course of economic events, either by feeding into policy formulation or having significant impact on microeconomic decision-making. The Department carries the responsibility, therefore, for a great deal of the detailed analysis undergirding conclusions with respect to the state of the economy and the direction of its movement.

Never in history has this assessment been more critical. And though we should insist on more modesty in promising that a particular action will produce a precise result, we must of course anticipate the general outcome of any given course of action. To do so with any degree of accuracy requires extraordinary care on the part of economic analysts and meticulous attention to the analysis on the part of policy makers. Let's hope this marriage of analysis and policy goes not asunder.

Even with the best analysis possible, policy making is fraught with many problems. Almost without exception, these fundamental problems involve conflicting demands by valid interests. At virtually no point are we confronted by a neat, clean challenge simply to summon up the ingenuity and courage to go scale a mountain.

We can't pass one law that will produce full employment, promote growth and development, conserve resources, protect the environment and assure the quality of life for all. There are those who will suggest otherwise, but they are not in office. Those of us who are here are increasingly impressed that we can only proceed on the basis of trade-offs. And that means that our programs and policies will always provide less for some interests than they expect. While I hope we can apply to our work the knowledge and methodology of a discipline I respect, I am sure that the success of this Administration will come down to its ability to provide tough-minded leadership; to convince the American people that understanding the options and accepting the need for trade-offs are critical, if we would promote the common good.

Energy Digest

ELECTRICITY FROM HEAT . . . A Massachusetts inventor has received a $40,000 contract from the Energy Research and Development Administration (ERDA) to investigate an unusual idea for converting heat energy to electricity. Joseph Yater's idea was evaluated by Commerce's National Bureau of Standards (NBS) under a Federal Government energy-related inventions program and recommended to ERDA as worthy of support. The device Yater wants to build would consist of a large number of tiny resistors in microcircuit models which may be heated by solar energy. A major goal of Yater's research is to evaluate techniques for maintaining the necessary thermal barrier between the resistors and rectifying diodes, and to investigate state-of-the-art production techniques for the very small circuits. More than 4,000 inventions have been submitted to NBS so far, and ERDA is presently considering a number of them for funding.

ENERGY-SAVER LOANS . . . A Seattle bank is promoting energy conservation through lending policies. It provides reduced interest rates on loans for automobiles, boats or home improvements incorporating energy-saving ideas. Mortgage loans on houses meeting certain criteria are available a full percentage point lower than the going rate in the Seattle area. Four-year auto loans at 8¾ percent are available for new autos getting 25 mpg or more, versus 9¾ percent at most banks. Home improvements incorporating sound insulation practices qualify for 8¾ percent loans, as compared to 10¾-12 percent elsewhere. Bank officials say the program is based on sound business principles because customers who are conservation conscious tend to repay their loans promptly.

ASSIST FROM NATURE . . . Ocean-going vessels taking advantage of Gulf Stream currents have realized significant fuel savings, according to a study conducted by Exxon in cooperation with Commerce's National Oceanic and Atmospheric Administration. The study relied upon analysis of NOAA satellite pictures to determine the ever-shifting location of the Gulf Stream, particularly its western boundary. The most rapid currents within the Gulf Stream are found about 12 to 15 miles east of the western boundary, generally moving northward as much as four knots faster than waters on either side. During 1975 six of Exxon's fleet of tankers, carrying oil from ports in the Gulf of Mexico to terminals along the East Coast, intentionally used the Gulf Stream to hasten their northbound passage, and avoided it when southbound. At the same time, five sister ships continued their normal navigating practices, without benefit of the satellite-derived Gulf Stream information. The masters of these "control" vessels were all experienced Gulf Stream navigators. The group supplied with the satellite data consistently performed more efficiently than the other, effecting both time and fuel savings.

BIG SURVEY OF LITTLE FIRMS . . . The Federal Energy Administration is surveying small business firms to determine their energy concerns, problems, and attitudes. Designed to measure the impact of energy regulations on these firms, the survey will be undertaken by the National Federation of Independent Business, a nationwide association with more than 475,000 members involved in every facet of small business. The survey, to be taken in April, will be sent to all NFIB members. It will seek information regarding energy use costs and shortages as well as members' viewpoints on various energy concerns, including the possible effect of emergency regulations on their operations.

SOLAR PLANT SITE . . . ERDA will build its first solar electric pilot plant in the Mojave Desert near Barstow, Calif. A team of utility companies headed by Southern California Edison offered the site and will operate the the 10-megawatt electric generating plant upon completion of construction in 1980-81. The plant will demonstrate the central receiver concept, which consists of a field of mirrors that redirect the sun's energy to a central receiver (boiler) atop a tower. In the receiver, the radiant solar energy is absorbed in a circulating fluid which can be used to drive a steam turbine generator to produce electricity or can be transferred to a storage system for later use. The peak (maximum) output of the plant is approximately the level of electricity used by a city of 10,000 persons. However, the plant is not intended as a sole source of electric power, since its storage capacity will permit it to operate for only a few hours when the sun is not shining.

Domestic Business Report

U.S. Patent Applications Level Off; Foreign Rise

GROWING BREAKDOWN IN TECHNOLOGICAL INNOVATION NOTED IN RECENT PATENT BRIEFING FOR COLLEGES

Technological innovation is on the decline in the United States. As a result applications for patents from domestic sources have leveled off in recent years, while those from foreign sources are rising rapidly.

This is one of the points made at the recent Tenth Annual Briefing Conference held by Commerce's Patent and Trademark Office at Crystal Plaza, Arlington, Va. Attending were deans, faculty members and patent administrators representing 28 U.S. colleges and universities.

A highlight of the conference was an explanation of the difficulties that inventors have in marketing their inventions and in making money from them, and the cost and the problems that small businesses incur in trying to make a go of it with a new invention.

The problems encountered were described by Harold D. Wells, President and Chief Executive Officer of the Black Body Corp. His BBC Food Equipment Division manufactures conveyorized, electric, multi-tiered ovens that cook automatically an unlimited number of different foods simultaneously at different temperatures and times.

Problems facing inventors

Wells said there is a growing breakdown in U.S. innovation. Among the problems, he said, is the difficulty of obtaining financing, the cost, risk, and time involved in getting started, in part a consequence of inflation, the problems involved in persuading large corporations to become interested in a new product, and government regulations, such as the requirements of the Securities and Exchange Commission, which although intended to protect the public are costly and burdensome for a beginner in manufacturing.

"The days of grubstaking for small businesses and small manufacturers are over," he said.

He referred to the Patent and Trademark Office as the most important government agency from the standpoint of protecting the small manufacturer.

"There is a true connection," he said, "between the slip in innovation and the difficulty in getting financing for a small enterprise. To start a small business costs a lot of money, way out of proportion to what it did 50 years ago.

"A lot more concern should be directed at encouraging new ideas. Something should be done to encourage the individual inventor."

Jacob Rabinow, chief research engineer, Institute for Applied Technology, National Bureau of Standards (NBS), told of problems he had encountered in finding a market for some of his inventions. He emphasized the need to encourage inventors.

"It is very important," he said, "to support small business. Of those who start small businesses, most don't make it."

Rabinow described inventions as "old ideas arranged in new ways," adding that "a good invention is logical but completely unexpected."

C. Marshall Dann, Commissioner of Patents and Trademarks, told conferees that the office now receives more than 100,000 patent applications each year, more than one-third from foreign sources. He pointed out that the office search file contains some 22 million documents. Issued patents, he said, represent a great source of applied technology, and are a national resource not as well utilized as might be.

The Patent and Trademark Office, Dann explained, makes a very good examination to assure the validity of issued patents as far as possible, but it is not foolproof. No country, he added, conducts a better examination.

Rene Tegtmeyer, Assistant Commissioner for Patent Examining, gave a detailed description of the processing of patent applications, saying "We attempt to do as good a job as our expenditures and resources permit."

He commented that although U.S. inventors have not been filing as many patent applications in recent years, the rapid rise in applications from foreign sources reflects the post-war economic recovery in a number of those countries.

Tegtmeyer said 102,000 new applications for patents were received in FY 1976, while disposition was made of 107,000 examinations. The office, he said, has almost achieved its goal of reducing the pendency of applications to an average of 18 months, a sharp decline from the 37 months average of 10 years ago.

Toxic Substances Act Delineated In New Book

The meaning of the Toxic Substances Control Act of 1976 to manufacturers, processors and distributors, to exporters and importers, to the states, and to the Environmental Protection Agency and other federal agencies is explained in a new book from the Bureau of National Affairs.

The Toxic Substances Control Act is a comprehensive analysis by Ray M. Druley and Girard L. Ordway. The purpose of the Act, which became effective January 1, is to control chemical substances that present a hazard to health or the environment. The mechanism of the Act is the regulation of chemicals in commerce without regard to specific use or area of application.

By applying the control at the source before the chemicals become dispersed into the environment, control of a wider range of chemical hazards is made possible.

In addition to the text of the act, the House and Senate committee reports and floor debate, the book takes up requirements relating to enforcement, judicial review, record-keeping and reporting, and much other pertinent information.

The book is available from the publisher, BNA Books, 1231-15th St. NW., Washington, D.C. 20037, at $15.00 per copy.

MID-DECADE CENSUS TO KEEP DATA CURRENT

To keep up with the needs of a data-hungry economy for current information, Commerce's Bureau of the Census will begin conducting a regular mid-decade census beginning in 1985.

The new census will not be quite as extensive as the one taken at the beginning of each decade, but will probably concentrate on types of data on which industry and governmental decisions are based, and where a ten-year gap between reliable information can cause real problems.

A law was passed by Congress and signed by the President last fall, amending the census code to allow for the mid-decade count. The amendment also strengthens existing confidentiality provisions relating to census and survey records and encourages the use of data-collection techniques which minimize the public reporting burden. Additionally, it removes the jail sentence but retains fines as possible penalties for refusal to answer or willfully giving false answers in mandatory censuses and surveys.

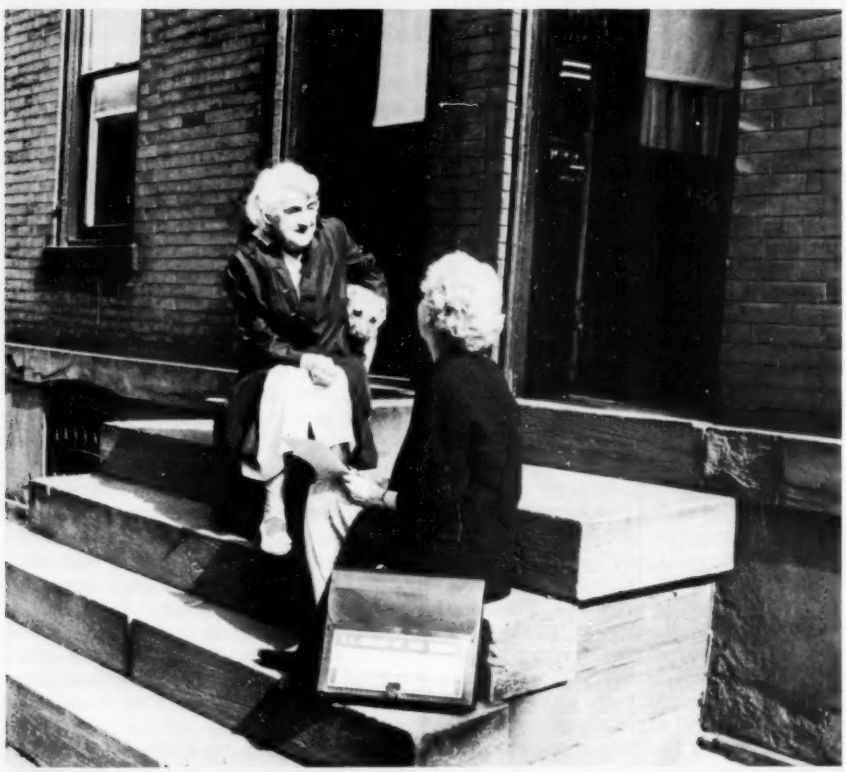
In approving the legislation, the Congress intentionally avoided establishing by law the scope and content of the mid-decade census. Rather, the legislation is flexible so that as the time approaches for detailed plans to be drawn, the Census Bureau may take into account data needs as seen for 1985. Congress clearly intended that the law not require that the mid-decade census duplicate the decennial one, provided that certain basic objectives are met: updates of characteristics along with population totals are needed for distribution of Federal Governments funds to state and local governments, and for the administration of federal program benefits to various segments of the population.

The law specifically prohibits the use of mid-decade census results for reapportioning the House of Representatives or delineating congressional districts. Congress also anticipates that the mid-decade program would be designed to satisfy some of the statistical needs now met through special surveys.

Among the data users that urged the mid-decade censuses were state and local governments and public and private agencies, which rely on statistics below the national level for planning, research and program administration. Other data users have also emphasized the importance of having some of the basic subjects covered in the decennial census provided on a comparative basis more than once in each decade.

With regard to the other provisions of the new law, the time-honored confidentiality restrictions of the previous law have been refined and clarified to eliminate any ambiguities.

While the jail sentence for noncompliance in mandatory surveys has been removed, the fines remain in force. This is consistent with the application of these sanctions over time. Similarly, a provision has been added, consistent with current Census Bureau policy, that no one shall be required to disclose information regarding religious beliefs or affiliation.



TAKING THE CENSUS—*In addition to the regular decennial census, a new law authorizes a mid-decade census beginning in 1985, to obtain specialized data.*

Institute Offers Courses In Maritime Subjects

Both merchant seamen and armchair sailors can take advantage of the courses offered by the Franklin D. Roosevelt Institute of Maritime and General Studies, of New York City. The school, an educational division of the Seamen's Church Institute, attempts to provide quality education at reasonable costs in two basic areas: professional skills and personal development.

The Institute offers a certificate program in maritime transportation, aimed primarily at shippers, carriers, forwarders, consignees and their agents, with emphasis on maritime and inter-modal/multi-modal aspects of the industry. Or, individual courses can be taken.

All courses are taught by working professionals in the industry, and meet one evening a week for eight to 12 weeks. Cost of the courses averages $60 each to the general public, and they are tuition free to active and officially retired merchant seamen.

For further information, contact the Roosevelt Institute, SCI, 15 State Street, New York 10004.

Directory Lists Industrial Realtors

A directory of industrial realtors, who offer to provide all the functions of a real estate department for any U.S. business, has just been published by the Society of Industrial Realtors.

The 179-page directory gives detailed state-by-state information on the approximately 1,200 members of the society. Those listed as active members, according to the organization's president, must demonstrate a record of at least eight years successful experience as an industrial property broker, and pass a detailed written examination, among other requirements.

The directory also outlines the Society's services, qualifications, objectives and publications. The Society has 584 branch offices in 211 cities throughout North America.

Copies of the Membership Directory are available without charge from Society of Industrial Realtors (DCI-3), 925-15th St. NW., Washington, D.C. 20005.

BARRIERS RETARD GROWTH OF TELECOMMUNICATIONS

The growth in the market place of four promising telecommunication technologies is being retarded by a number of regulatory, economic, policy, and technical barriers, according to a study published by Commerce's Office of Telecommunications (OT).

This finding is included in a report entitled *Lowering Barriers to Telecommunications Growth,* prepared by a Telecommunications Task Force established in the summer of 1975 by Dr. Betsy Ancker-Johnson, Assistant Secretary of Commerce for Science and Technology. The work of the Task Force was coordinated by the Office of Telecommunications with help from the National Bureau of Standards and the Patent and Trademark Office.

The report centers on forces inhibiting satisfactory growth in the market place in direct satellite communications, land mobile radio, nonentertainment broadband communications networks, and fiber optic communications.

"The presence of these barriers is disturbing," said Dr. Ancker-Johnson, "since telecommunication growth will be a critical factor in our future use of information. And the flow of information is close to the heart of our economy.

"In fact, the importance of telecommunications and the diversity of institutions that will have a hand in its advance suggest the need for a national agenda of telecommunications concerns. And this is the main theme that emerges from the study."

The report recommends 19 actions pertinent to the four technologies. One recommendation proposes that the White House Office of Telecommunications Policy, the Federal Communications Commission, and other federal agencies reexamine the national policy and regulations that govern the use of domestic and international small earth terminal satellite systems. Another suggests that the White House Domestic Council's working group on regulation acquire the research necessary to establish the probable consequences of partial deregulation of cable television.

In addition, the report suggests a way to initiate the process of composing a national communications agenda: build upon the reactions to the report.

"Any truly national agenda," says John M. Richardson, Director of OT, "would of course encompass far more than just the issues and actions found in this document. Such an agenda should embrace the entire field of telecommunications, complex as that field is. However, the material in this report is a convenient starting point."

A separate chapter of the report is devoted to each of the four selected technologies. The current status of the technologies is discussed, the issues affecting their growth, the actions designed to address these issues, and the impact that these actions might have.

The report contains eight appendices. The first of these summarizes the comments on a draft version of the report circulated late last year. Alongside the comments are OT's responses to them. The remaining appendices include technical details and tables relating to communication satellites, fiber optics, and broadband networks; a summary of international trade problems as seen by industry; and an essay on developing solid-state technologies and the vitality of the electronics industry.

Lowering Barriers to Telecommunications Growth, OT special publication 76-9, can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The cost is $3.25 per copy, and the stock number is 003-000-00504-6.

Federal Regulations Effect On Small Business To Be Monitored By Joint Group

An experimental project to determine the effect of regulations on the ability of certain small businesses to obtain capital funds has been announced jointly by Commerce's National Bureau of Standards (NBS) and the Securities and Exchange Commission (SEC).

Capital markets supplying financing to small, technology-based firms, such as manufacturers of electronic components, scientific instruments, chemicals, and computer equipment, have shrunk in recent years. These firms must necessarily be concerned by any reductions in funding that may result from securities regulations, since they are heavily dependent on equity financing and stand to lose when equity markets dry up.

To determine the effect of securities regulations, NBS' Experimental Technology Incentives Programs (ETIP) and the SEC will establish an experimental monitoring system to obtain timely information on the subject.

The system will allow simultaneous analyses of benefits and costs of regulations so that the net effect can be assessed within a short time after the regulation has been implemented or changed. Such a continuous monitoring system would replace ad hoc economic cost analyses which are often made several years after a regulation has been in effect.

The system will be developed in two phases. In phase one, two SEC research fellows will develop the system and test it on several new or existing regulations that affect capital financing of small businesses.

If this is successful, phase two will be initiated under which more tests will be conducted and the system refined. Phase two tests will be extended over longer periods of time to capture the impact of business cycles and other economic fluctuations. This phase will end with plans for making the monitoring system a permanent part of the SEC regulatory process.

Commerce Secretary Juanita M. Kreps said the program may help reduce the regulatory burden on small businesses.

"By improving the mechanism for obtaining information about the economic impact of regulations," she added, "it will be possible to insure that unnecessary regulations are avoided. The small businessman is already groaning under the weight of government regulations."

ETIP will provide the SEC with up to $400,000 to support both phases of the project. SEC will provide senior management, staff and facilities support for the project as required.

ETIP was begun in fiscal year 1973 as a means of facilitating changes in government policy that affect technological innovation. One of ETIP's major areas of interest is federal regulatory policies and thus the joint project may ultimately contribute to improved practices for other regulatory agencies.

Security Checklist Available For EDP

A new 113-point physical security checklist has been published for users of computer systems. It reflects the increasing dependency of thousands of business and government organizations on uninterrupted service from their computer installations, and the need to protect those installations.

The checklist covers such critical areas as fire prevention, access control, flood exposure, housekeeping, electric power, personnel aspects, hardware and software factors, resource sharing exposures and contingency planning.

The compact report includes a specialized security bibliography and a briefing on application of risk management methods in determining EDP facility requirements.

It is available from Reymont Associates, 29 Reymont Avenue, Rye, N.Y. 10580 at $5 per copy.

U.S. BUSINESS PLANS 1977 CAPITAL SPENDING OF $134.6 BILLION

Business expects to increase capital spending 11.7 percent in 1977, to $134.6 billion, according to the survey conducted in late January and February by Commerce's Bureau of Economic Analysis. Spending rose 6.8 percent in 1976, to $120.5 billion.

Spending is expected to rise 3.2 percent in the first quarter of 1977 to a seasonally adjusted annual rate of $129.2 billion and 2.7 percent in the second quarter to $132.7 billion. Business plans spending in the second half of this year of $137.9 billion (annual rate), 5.3 percent above the first half and 11.3 percent above the second half of 1976.

The survey also reveals sales increases expected for 1977 by manufacturers, trade firms and public utilities. All of these groups expect smaller sales increases this year than those realized last year.

These figures are not adjusted for price change. Capital goods prices, as measured by the implicit price deflator for fixed nonresidental investment in the national income and product accounts, rose 4.7 percent in 1976. The increase in the deflator indicates that real spending increased about 2 percent in 1976; if capital goods prices increase this year at about the same rate as last year, an increase in real spending of 7 percent for 1977 is suggested.

Manufacturing industries plan a 12.7 percent increase in capital spending from 1976 to 1977. The increase is 13.5 percent for durables industries, with the strongest increases by motor vehicles (40 percent), nonelectrical machinery (18 percent), and "other durables" (19 percent). Nondurables industries plan a 12 percent increase, with the strongest advances by rubber (28 percent) and "other nondurables" (21 percent).

Other manufacturing industries planning sizable increases (11-15 percent) are aircraft, electrical machinery, food-beverage, textiles, paper and petroleum. Producers of primary iron and steel plan a 4 percent decrease in spending.

Nonmanufacturing industries plan an 11 percent increase, reflecting strong advances by airlines, public utilities, communications, and the commercial group. Railroads plan spending at about the same rate as last year. "Other transportation" firms plan a 37 percent decline, reflecting lower spending for the Trans-Alaska pipeline.

Business plans to increase total capital spending at about the same rate in the first and second halves of 1977. In manufacturing, a 4.5 percent increase is planned for the first half and 7 percent for the second half. In nonmanufacturing, the expected increase in the first half is 6.5 percent, compared with 4 percent in the second half.

Manufacturers expect sales to rise 10.5 percent in 1977; last year their sales rose 13 percent. Durables producers expect an 11 percent increase, compared with 15 percent in 1976. Nondurables producers expect a 9.5 percent increase, compared with 11 percent last year.

Wholesale trade firms expect an 8 percent increase in sales in 1977, compared with 11.5 percent in 1976. Public utilities project a 14.5 percent increase in revenues, compared with 15.5 percent last year.

This summary of plant and equipment expenditures is based on estimates for nonagricultural industry groups. The basic data are derived from reports submitted by a large sample of companies, unincorporated as well as corporate, to Commerce's Bureau of Economic Analysis. Transportation companies report to the Interstate Commerce Commission.

Additional discussion appears in the March issue of Commerce's *Survey of Current Business*. The monthly Survey is available from most Commerce district offices, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at an annual subscription price of $48.30, including weekly supplements.

CAPITAL SPENDING: PLANNED, 1977; ACTUAL, 1975-76

	Actual 1975	Actual 1976	Expected 1977	Percent Change 1975 to 1976	Percent Change 1976 to 1977
	(Billions of dollars)				
All Industries	112.78	120.49	134.58	6.8	11.7
Manufacturing	47.95	52.48	59.16	9.4	12.7
Durable goods	21.84	23.68	26.88	8.4	13.5
Nondurable goods	26.11	28.81	32.29	10.3	12.1
Nonmanufacturing	64.82	68.01	75.42	4.9	10.9
Mining	3.79	4.00	4.29	5.4	7.2
Railroad	2.55	2.52	2.52	−1.2	.3
Air transportation	1.84	1.30	1.70	−29.2	30.9
Other transportation	3.18	3.63	2.28	14.3	−37.1
Public utilities	20.14	22.28	26.26	10.6	17.9
Communication	12.74	13.30	15.06	4.4	13.2
Commercial and other	20.60	20.99	23.31	1.9	11.0

Directory Lists Plant Tours

A gold mine in Lead, S.D. . . . a brewery in St. Louis . . . ship repair facilities in Port Everglades, Fla. . . . or a fish hatchery in Wisconsin: these are just a few of the tours available to the public without charge listed in *USA Plant Visits 1977-1978*, issued by Commerce's United States Travel Service (USTS).

The 150-page directory contains more than 1,500 U.S. businesses or factories offering tours in the 50 states, the District of Columbia and three territories. Included in each listing are the days, times and details on arrangements for tours. The main listing is by state and city, and an index separates tours by industry, such as automobiles, machinery, glass, chemicals, confections, cereal, and many others.

The directory is part of USTS's program to promote tourism to and within the United States by both business and pleasure travelers.

USA Plant Visits 1977-1978, priced at $2.80, is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The GPO stock number 003-012-000-41-7 should accompany orders.

Film Treats Problems Of Product Liability

A short film on product liability—*Products and the Lawsuit Explosion: Who Pays?*—is available from the Insurance Information Institute.

The 18½-minute color film explores the impact of the product liability problem on manufacturers, consumers and the insurance business.

The 16mm film is available on a free loan basis for showings to business and trade organizations and consumer and insurance groups. Requests should be submitted two weeks in advance to the Insurance Information Institute, 110 William St., New York 10038.

The film may be purchased at $100 a print by member companies of the Institute, schools and organizations of insurance agents. The price is $250 to others.

CERTIFIED GREENS—*Commerce chemist Harry Rook worked on the development of a standard for spinach. Concentrations of 27 trace elements have been determined.*

Eat Your Standard Spinach; . . . It's Good For You!

Everybody knows about Popeye's iron, but spinach also contains 26 other elements, including copper, manganese, strontium, zinc and europium. Most of them are good for you, according to Commerce's National Bureau of Standards (NBS).

NBS scientists have developed a Standard Reference Material for Trace Elements in Spinach which is used to calibrate instruments that test for toxic substances present in minute quantities in a sample "market basket" of fruits and vegetables.

The spinach standard was developed for the Food and Drug Administration, which is now using it nationwide in its field stations. Fruits and vegetables containing too much of the toxic elements are not allowed in the marketplace.

A number of trace elements present in foods have been identified as essential to good nutrition—iron, copper, chromium, cobalt and zinc. Still others have been identified as harmful contaminants: arsenic, mercury, lead and uranium. The role of most other trace elements such as strontium, rubidium and manganese has yet to be determined.

In recent years, questions have been raised about contamination of fruits and vegetables grown near sources of urban pollution. Leafy vegetables, such as lettuce and spinach, grown near highways are reported to acquire potentially harmful metals from motor vehicle emissions which are difficult to remove by washing.

To determine whether foodstuffs are contaminated, scientists must painstakingly analyze thousands of samples of food grown at various locations in clean and polluted environments. The NBS standard spinach is used as a reference to assure accurate analyses.

To make the standard, NBS scientists used more than 9 metric tons (10 tons) of commercially-grown spinach. It was freeze-dried to a weight of 585 kilograms (1300 pounds), ground, blended, homogenized and carefully analyzed. Spinach is the second botanical standard offered for trace element analysis; the first was orchard leaves.

Solar Radiation Network To Aid Energy Conservation

A nationwide solar radiation network to help solar energy technology has been inaugurated by Commerce's National Oceanic and Atmospheric Administration (NOAA), in cooperation with the Energy Research and Development Administration's Division of Solar Energy.

Solar radiation measurements will be taken at 35 stations of NOAA's National Weather Service to provide data needed by prospective solar energy users. The measurements will give scientists and engineers information on how much solar energy is available at each site, on the average, for use in home heating or cooling, agricultural drying, heating water, generation of electricity, and many other purposes.

The network will permit solar energy users to determine the best size of solar energy collectors, energy storage capacity, and auxiliary energy sources that will be needed. Accomplishing this for home heating and cooling—an application that may be expected on a large scale in the not too distant future—will by itself more than offset the cost of the network.

Solar radiation information is useful not only for solar energy technology. Hydrologists use it to estimate evaporation from the soil, lakes and reservoirs; agricultural scientists, to help estimate crop growth; architects, to design houses with desired exposure to the sun; and air-pollution experts, to estimate production of photochemical smog during periods of air stagnation.

Traditionally, the instrument used to monitor solar radiation has been the pyranometer which measures the amount of radiation falling on a horizontal surface. In the new network, a new and improved pyranometer will be used that can measure the amount of solar energy falling on a surface to an extremely high degree of accuracy. All of the pyranometers in the new network have been carefully calibrated by NOAA's Air Resources Laboratories at Boulder, Colo., against the international standard of the World Meteorological Organization, and will be periodically recalibrated.

Data acquisition and recording equipment for the network was purchased by ERDA with funds from the National Science Foundation.

In solar energy technology, solar radiation is not the only weather information needed. Other data such as temperature and wind must be known to determine local energy needs and to design collectors for home heating and cooling of optimum size.

NOAA's Environmental Data Service at Asheville, N.C., combines conventional weather data with solar data onto a single magnetic tape called SOLMET, for archival and public distribution. Such tapes for each of the 35 stations will be available at nominal cost to all users. In the future, SOLMET data may also be available from other NOAA and non-NOAA stations measuring solar radiation.

The new network includes 10 special stations at which diffuse or scattered solar radiation also is to be monitored. This provides an indirect means of computing the direct solar beam—important in applications where solar radiation is to be focused on a small area to produce high temperatures.

Later, all 35 stations in the network will be supplied by ERDA with a pyrheliometer, an instrument to measure the direct solar beam.

SATELLITE TO AID CENSUS RESEARCH

The big eye in the sky may soon be helping Commerce's Census Bureau count noses. A joint research project with the National Aeronautics and Space Administration's Goddard Space Flight Center is investigating the use of space graphics obtained from the LANDSAT orbiter satellite to delineate urbanized areas.

An urbanized area, in general, comprises the central city of a standard metropolitan statistical area (SMSA) plus adjacent incorporated places and unincorporated territory having a population density of at least 1,000 persons per square mile. The Census Bureau's major objective in improving delineation of urbanized areas is to provide a better separation of urban and rural population in the vicinity of the largest cities.

In recent years, references to urbanized area boundaries have been incorporated in several pieces of legislation, notably the Federal Highway Acts, as a means of determining program entitlement or level of funding.

Historically, the delineation of urbanized areas has occurred in connection with decennial census and has involved establishing a fringe zone which represents the land between the previously defined urbanized area and the probable maximum extent of urbanization during the decade. This zone was then subdivided into small data collection areas.

As soon as field enumeration counts were available, they were sent to the Census Bureau's Geography Division for analysis. Based upon population counts, land use and other considerations, firm urbanized area boundaries were delineated prior to the final processing of the census data.

The Census Bureau hopes that the use of remote sensing data from the LANDSAT satellites, and perhaps other high altitude photography, will help narrow down the urban fringe zone to a more accurate representation, and thus reduce clerical effort and cost.

To date, research involving the Maryland portion of the Washington, D.C.-Maryland-Virginia SMSA and the Austin, Tex., SMSA suggests that the satellite imagery is useful in detecting new urban growth areas. It has also demonstrated that residential densities in excess of 350 housing units per square mile (which was used as a surrogate measure of a population density of 1,000 persons per square mile) can be identified on computer-processed LANDSAT data tapes.

The research effort is now trying to discover answers to questions related to the sensitivity of the LANDSAT scanners, which may cause variations in results obtained. This includes studying the differences caused by variations in climatological, topographical and vegetation domains.

The Census Bureau anticipates using these new techniques in a parallel to the traditional methods for 20 to 30 areas during the 1980 census as a means of evaluating the relative time and cost of the two approaches. If successful, LANDSAT imagery may provide the capability of more closely monitoring urbanized area changes between censuses in the future.

California Leads Again In Patents Granted

California leads the nation for the 13th consecutive year in the number of patents granted to its inventors, according to 1976 statistics from Commerce's Patent and Trademark Office.

A total of 74,976 patents were issued and of those, U.S. inventors received 47,952, which is equivalent to one to every 4,216 persons in the total population.

Californians received 6,704—one to every 3,210 persons; New York was second with 4,797—one to every 3,770 persons; New Jersey, third with 3,875—one to every 1,893 persons and Illinois fourth with 3,871—one to every 2,901 persons.

Delaware led on a per capita basis with 428 patents issued—one to every 1,360 persons.

Residents of foreign countries received 27,024 patents. Japan led with 6,780; The Federal Republic of Germany was second with 6 320; United Kingdom was third with 3,098; France was fourth with 2,519, and Switzerland was fifth with 1,500.

Income Shifts Parallel Population's: Away From Cities And Toward The Sun

Personal incomes of Americans reflect the movement of people away from central cities and to the Sun Belt.

Non-farm personal income grew faster in non-metropolitan counties than in metropolitan ones between 1969 and 1973, the most recent peak years in the national business cycle.

According to Commerce's Bureau of Economic Analysis, non-farm income growth was below the national average in 21 of the 28 large Standard Metropolitan Statistical Areas with populations of one million or more in the New England, Mideast, Great Lakes, Plains, and Far West regions.

Growth was especially slow in Seattle, Los Angeles, and Hartford—all affected by a slump in aircraft production—and in New York, Philadelphia, Pittsburgh, Buffalo, Cleveland, and St. Louis. The latter group consists of old industrial centers faced with high production, distribution, and public-service costs due in part to high wage rates and costs of operating obsolescent plants.

The seven metropolitan areas in these regions where income grew faster than nationally were Washington, Nassau-Suffolk, Columbus, Portland, Anaheim, San Jose, and Riverside.

In contrast to the national pattern, nonfarm income in the Southeast, Southwest, and Rocky Mountain states grew faster in metropolitan counties. Growth in both categories of counties was particularly rapid in retirement-related transfer payments, contract construction, and manufacturing due to the migration of retirees and the relocation of manufacturing plants to the Sun Belt.

Nonmetropolitan counties in the Southeast attracted apparel, leather, and other nondurable manufacturing from New England and the Mideast, and producers of machinery and fabricated metals from the Mideast and Great Lakes states.

The geographic dispersal of these manufacturing industries was in part a response to improved highways and truck transportation and other technological developments, which encouraged movement to low-cost areas.

Nonfarm income grew at rates well above the national average in six of the eight large SMSAs in the southern and mountain states, at the national average rate in Dallas (where cutbacks in aircraft production limited growth), and at a rate somewhat below the national average in New Orleans.

Growth in the six fast-growing Sun-Belt SMSAs—Tampa, Phoenix, Miami, Denver, Atlanta, and Houston—was particularly strong in construction and in industries that provide services to the rapidly increasing numbers of workers and retirees who are migrating into these large metropolitan centers.

Personal income consists of private and government wage and salary payments in cash and in kind, other labor income, proprietors' income, interest, net rents, dividends, and transfer payments, less personal contributions for social insurance.

Additional data appear in the December *Survey of Current Business*, published by the Bureau of Economic Analysis. It is available from the District Offices of the Department of Commerce or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, at an annual subscription price of $48.30 including weekly supplements; single copy $3.

NEW HOPE FOR BUYERS WHO GET 'LEMONS'

Recent legislation could make product warranties an increasingly important factor in consumer buying decisions. A new government publication can help retailers understand their responsibilities under the law.

The Federal Trade Commission has published a new consumer pamphlet, *Warranties,* which explains how consumers can now use easy-to-understand warranties to "comparison-shop." It also explains warranty rights and how to enforce them.

This pamphlet comes just as new FTC warranty rules go into effect. These rules, issued under the Magnuson-Moss Warranty Act, require retailers to make available to shoppers before sale all warranties on consumer products which were manufactured on January 1, 1977, or after, and which sell for more than $15.

Retailers must display warranties on or near the warranted products, or have warranties available in binders. If binders are used, they must be displayed on counters or be indicated by eye-catching signs. Catalog, mail order and door-to-door sales are also covered by rules requiring warranties to be available to shoppers.

Full vs. limited warranties

Under the new regulations, warranties must be easy to read and understand, and must contain all essential information. The Act also requires warranties to be labeled "full" or "limited." A full warranty not only promises free and prompt remedy of defects, but also allows consumers a free replacement or full refund for "lemons." Also, some important limitations are not allowed in full warranties.

A limited warranty offers something less: for example, the consumer can be required to pay a portion of the costs (such as labor). Limited warranties do not include the "lemon" promise.

The pamphlet *Warranties* explains these terms and what shoppers should look for in warranties. Single free copies are available from the Consumer Information Center, Pueblo, Colo. 81009.

Apparel Industry Urged To Assist Training Programs

The need for qualified managers with college training in the apparel industry has increased substantially in the past ten years. Sensing this, the American Apparel Manufacturers Association (AAMA) has worked with colleges to interest them in the industry's needs, helped some of them develop meaningful curricula, and then worked to interest both the industry and young people in the availability of these courses and the potential for career growth.

Ways in which apparel industry companies have aided the program include providing scholarships, sponsoring loan funds, and establishing cooperative programs in which students alternate academic training and work periods.

Courses specifically developed for the apparel disciplines are offered at the Fashion Institute of Technology, North Carolina Vocational Textile School, Philadelphia College of Textiles and Science, Southern Technical Institute of Georgia Tech, and the George Brown College of Applied Arts and Technology in Toronto.

The AAMA has prepared a booklet, *A Course of Action for Apparel Manufacturers,* to show apparel firms how they can become involved in establishing apparel manufacturing management training programs in the high schools and colleges in their areas. For a free copy, write AAMA, 1611 N. Kent Street, Suite 800, Arlington, Va. 22209.

Calendar Of Business Events

Mar. 30-Apr. 1—Washington—Zero-Base Planning & Budgeting Seminar, George Washington U. Contact: Advanced Mgt. Education Ctr., School of Gov't & Business Admin., George Washington U., Washington, D.C. 20052 (202-676-6059).

Apr. 1—Milledgeville, Ga.—Productivity Seminar for Business Leaders, Russell Auditorium, Georgia College. Sponsors: Ga. College, Commerce Atlanta District Office, Ga. Business & Industry Assn., local area Chamber of Commerce. Contact: Director of Continuing Education, Ga. College, Milledgeville, Ga. 31061.

Apr. 1—Los Angeles—Federal Procurement Conference, Hyatt House Hotel, Int'l Airport. Sponsor: U.S. Rep. Charles H. Wilson. Contact: Gary Reinhart, Office of Rep. Wilson, 15000 Aviation Blvd., Room 2W30, Lawndale, Calif. 90251 (213-536-6680).

Apr. 1-3—Detroit—Conference on Unemployment, University of Detroit. Contact: Mike Whitty, Labor Research Assoc., Dept. of Sociology & Social Work, U. of Detroit, 4001 W. McNichols, Detroit 48202 (313-927-1280).

Apr. 4-6—Atlanta—Cryogenic Technology for the Petrochemical Industry, Sheration Biltmore. Sponsor: N.Y.U. School of Continuing Education. Contact: Heidi Kaplan, N.Y. Mgt. Ctr., Dept. 14NR, 360 Lexington Ave., New York 10017 (212-953-7262).

Apr. 4-7—Louisville, Ky.—Marketing and Design/Build/Lease in the Construction Industry, conducted by Jack Miller. Contact: Madeline Graeter, Group Communications, 6101 Southwest Freeway, Suite 401, Houston, Tex. 77057 (713-664-8818).

Apr. 5—Louisville, Ky.—Product Liability Seminar, Executive West Hotel. Contact: Georgene Savickas, Nat'l Paint & Coatings Assn., 1500 Rhode Island Ave. NW., Washington, D.C. 20005 (202-462-6272).

Apr. 5-7—Andover, Mass.—Advances in Bibliographic and Document Storage and Retrieval Systems, Institute for Graphic Communication Conference Ctr. Contact: IGC, 375 Commonwealth Ave., Boston, Mass. 02115 (617-267-9425).

Apr. 5-7—Arlington, Va.—Technical Forum III, Stouffer's National Ctr. Inn. Contact: American Apparel Manufacturers Assn., 1611 N. Kent St., Suite 800, Arlington, Va. 22209 (703-524-1864).

Apr. 5-8—Houston—Advanced Theory, Practice & Control of Injection Molding. Contact: Donald C. Paulson, CP Plastics Programs, Box 59, Southington, Conn. 06489 (203-747-5213).

Apr. 11-13—New York—Successful Consumer Packaging Seminar, Barbizon Plaza. Sponsor: N.Y.U. School of Continuing Education. Contact: Heidi Kaplan, N.Y. Mgr. Ctr., see address above.

Apr. 12-14—Birmingham, Ala.—8th Annual Alabama Trade Fair & World Trade Exposition, Civic Ctr. Contact: Dept. DCI-Fair, 20 East 46th St., New York 10017 (212-MU 7-1383).

Apr. 12-17—Scottsdale, Ariz.—Fluorocarbons Div. Annual Meeting, Camelback Inn. Contact: Society of the Plastics Industry, 355 Lexington Ave., New York 10017 (213-573-9400).

Apr. 13-15—Gaithersburg, Md.—10th Annual Symposium on Interface of Computer Science & Statistics, National Bureau of Standards. Contact: David Hogben, A338, Admin. Bldg., NBS, Washington, D.C. 20234 (301-921-2315).

Apr. 13-15—Amherst, Mass.—Food Service Systems, U. of Mass. Contact: Dr. G. E. Livingston, Food Science Assoc., 145 Palisade St., Dobbs Ferry, N.Y. 10522 (914-693-2660).

Traders Seeking Relief From Michelin Setback

HIGH COURT DENIAL OF 'ORIGINAL PACKAGE' RULE STIRS STATE TAX COUNTERMOVES BY IMPORTERS

In the changing world of commerce, at least one thing had seemed firmly fixed: the distance between the international trading community and state tax authorities, kept steady by an explicit clause in the U.S. Constitution and a legal definition that had stood for more than a century. But in the past 14 months a new and uncertain relationship has arisen here.

Speaking for the Supreme Court on Jan. 14, 1976, Justice William Brennan declared that a Georgia property tax assessed upon some imported tires was constitutionally acceptable, stating that the Constitution "clearly prohibits state taxation based on the foreign origin of goods, but it cannot be read to accord imported goods preferential treatment that permits escape from uniform taxes imposed without regard to foreign origin for services which the state supplies."

Since that ruling, traders have attempted to adapt to the new situation, tax officials at state and local levels have moved to take advantage of it, and challenges have been mounted in the courts and in legislatures.

The case that stirred the nation's highest court to act was entitled *Michelin v. Wages,* or simply, the Michelin case. At issue was the tax status of imported rubber tires and tubes which the Michelin Tire Corp. had stored at its distribution warehouse in Gwinnett County, Georgia. W. L. Wages, Tax Commissioner for Gwinnett County, assessed ad valorem property taxes against the imported tires and tubes. Michelin opposed the assessment in court.

The Supreme Court of Georgia disapproved taxation of the tubes, which had remained in their shipping cartons, but approved taxation of the tires, which had been mingled with other tires imported in bulk, sorted, and prepared for sale. Differing, the U.S. Supreme Court ruled instead that both tires and tubes could be taxed.

The Supreme Court had thus overturned a century-old precedent. Imported goods in their original package were now afforded much less protection from personal property taxes than had been the case under the previous rule. Faced with higher local and state taxes, trading firms explored new procedures for handling their goods, such as the use of foreign-trade zones, bonded warehouses or other techniques.

Meanwhile, tax authorities in, among other states, California, Florida, Texas, Oregon and Georgia, sought to apply the decision not only currently but retroactively. This policy, if successful, could bring an increase in tax revenues for periods of three to five years prior to the date of the Michelin decision. Countermoves naturally followed, including appeals to legislatures for protection against retroactive assessments and suits against tax assessors for refunds of taxes paid.

Basis for decision

In reviewing such developments, it is useful to examine the legal basis for the Michelin decision.

The U.S. Constitution's Import-Export Clause—Article I, Section 10—makes clear that only the Federal Government can collect taxes or duties on imports. At some time, however, imports lose their "import" status, and become subject to state and local taxation. To define this point of change of status, the Supreme Court in the year 1871 worked out an "original package" doctrine. Basically this provided that an import loses its distinctive character as an import, and becomes subject to state taxation, when it is removed from the original package in which it was brought into the country, and is mixed with the mass of property in the state or locality.

This is the rule that was swept away in the Michelin case. Justice Brennan and his colleagues decided that the Import-Export Clause does not prevent states from assessing a nondiscriminatory personal property tax against imported goods "which are no longer in import transit." Since many imported goods come to rest in a warehouse before being removed from their original package, many imports, which previously would have been exempt, will now be subject to taxation.

Deprived of the protection of the Import-Export Clause, importers now must look to the Commerce Clause of the Constitution for shelter against state and local taxation. This clause—Article I, Section 8—provides that Congress shall have the power to regulate commerce between the several states and between the United States and foreign nations. Fortunately, the courts have developed identical rules for goods in transit in interstate commerce and in foreign commerce so that numerous interstate cases can help determine when imports lose their status as such and become taxable.

Basically, these cases hold that goods become taxable if they have come to rest within a state, and stay there at the pleasure of the owner so that he can dispose of them within the state or ship them elsewhere. This rule means that, in general, interruption of the interstate transit for the benefit or convenience of the owner will cause a loss of tax immunity. Under this rule, removal from the original package, assembling, sorting, or other processing would almost certainly terminate the tax exemption.

Courts have recognized limited exceptions to the rule that interruption of an interstate or foreign journey for the owner's convenience will terminate immunity from state and local taxation. Thus, a U.S. District Court found that grain en route from North Dakota to New York City continued to be in interstate commerce during temporary storage at Duluth, Minnesota, before it was loaded on board ship. Because the grain continued in interstate commerce, it was immune from state and local taxation. Similarly, interruption of transit is permissible if it is used to accumulate goods to make up a shipment. Courts have held that the duration of the interruption must be reasonable under the circumstances, but have avoided setting precise limits.

One method of retaining foreign com-

merce status for goods is by placing them in a foreign-trade zone, which is a public utility type of service available in many U.S. port of entry areas. Goods in such a zone for bona fide Customs reasons have always been recognized as exempt from inventory type taxes by taxing authorities. Because of the Constitutional basis for the exemption, the situation is not considered to be changed by the Michelin ruling, that is, Michelin deals with imports and goods in foreign-trade zones have not yet been "imported."

Purely domestic goods would qualify for these inventory tax benefits only when the goods are placed in a zone for eventual exportation. To preserve "zone restricted status," goods cannot be brought back into U.S. Customs territory once they enter a zone.

With zones now available in 22 port communities and others likely to be established in the near future, this alternative has more practical significance than in the past. More information on foreign-trade zones can be obtained by writing to: Office of the Executive Secretary, Foreign-Trade Zones Board, Room 6886-B, U.S. Department of Commerce, Washington, D.C. 20230.

Other alternatives

Although imported goods in a bonded warehouse are considered outside U.S. Customs territory, they are treated somewhat differently from goods in foreign-trade zones. Imported goods in bonded warehouses which can be withdrawn for export only, such as stores for ocean-going ships, are exempt from local taxation. Other goods, however, which can be withdrawn and placed in domestic commerce after payment of duty, are generally not exempt from local property taxes.

Finally, some states have what are called "free port laws" which in general provide that goods in the process of being transported out of the state or out of the country are exempt from property or inventory taxes. California's statute in fact provides greater protection than the "original package" doctrine. It allows an interstate or intercountry journey to be interrupted by a stop in California, which can include the original package, repackaging and relabeling the goods, all without assessment of local personal property taxes. However, it should be noted that the California statute became effective Jan. 1, 1976 (two weeks before the Michelin decision was handed down), so it is no help in avoiding retroactive tax assessments.

Local tax authorities' use of Michelin to justify retroactive tax assessments has created the second bone of contention. The problem is simply stated. Under the laws of most states, tax assessors are empowered to tax property which has not been taxed in the past but which should have been. This "escape assessment" is authorized, for example, if the taxpayer did not file a property tax statement, or if property is undervalued. Since most escape assessments are subject to statutes of limitations of three to five years, many tax assessors have asked that importers pay additional taxes for these past years. The Supreme Court could itself have settled the retroactivity issue in its decision, but chose not to do so. Consequently, the problem has been left to state officials and taxpayers to work out.

A state statute is probably the best protection against escape assessments for importer-taxpayers, but even a statute does not afford iron-clad shelter. In California last year the legislature approved a statute which prevents retroactive assessment of inventory taxes on imports and exports if such action is based on the Michelin rule. However, tax assessors in five counties have challenged the law's validity under the California Constitution. The California Supreme Court probably will not have an opportunity to rule on the issue before the end of this year.

In court cases, importers can be expected to make an effective retroactive assessment. The U.S. Supreme Court's decision to establish a new principle of taxation was unexpected; importers could not have planned in anticipation of it. Furthermore, the retroactive assessments may frequently cause hardship. The importer probably has sold the goods and no longer holds in liquid form the proceeds from which to pay the tax. He may also have sold the goods at a lower price than he would have sold them had he known they would be subject to an inventory tax.

Finally, if retroactive assessments are upheld, some counties have voted ordinances which allow payment of tax bills in installments over three or more years. To qualify for this benefit, the taxpayer must usually show he would suffer hardship if forced to make immediate payment.

Developments stemming from the Michelin case will undoubtedly continue to unfold in the months ahead. Members of U.S. trading community can keep abreast of them through the Commerce Department's Foreign Business Practices Division, Room 4204, U.S. Department of Commerce, Washington, D.C. 20230.

Common Market Liberalizing Government Purchasing Rules

Government procurement practices of the nine member countries of the European Community will be liberalized under a directive recently adopted by the Community's Council of Ministers. For one example, tenders of $224,000 and above will have to be publicly advertised, except those in transportation, water resources, energy and telecommunications.

Member states have 18 months to adapt their domestic regulations to the directive, and are expected to use the full term to do so.

A companion resolution provides guidelines for dealing with third-country suppliers bidding on government contracts. Essentially, member states will be allowed to continue to apply their existing national procurement procedures with respect to such suppliers. Community officials believe that the new directive will enhance their bargaining position in the current international negotiations on government procurement being conducted in the GATT and the OECD.

Copies of the Council directive coordinating procedures for the award of public supply contracts (published in *Official Journal of the European Communities*, No. L-13, Jan. 15), and the Council resolution pertaining to non-EEC suppliers (published in *Official Journal of the European Communities*, No. C-11, Jan. 15) are available, at 70 cents each, from: European Community Information Service, 2100 M Street, NW., Suite 707, Washington, D.C. 20037.

WORLD MANUFACTURED EXPORTS: U.S. SHARE DECLINES MODERATELY

The U.S. share of world exports of manufactures, excluding shipments to this country, declined moderately in the third quarter of 1976 after showing no change during the April-June period. At 20.3 percent, this was the lowest U.S. share level in two years.

This shrinkage in the overall U.S. position resulted from generally slight declines among the individual commodity shares, but an especially large drop occurred in transport equipment. A more moderate decline was posted in nonelectric machinery, while in most of the other commodity groups the U.S. position was only marginally weaker. In contrast to this general pattern, the U.S. standing in electric machinery continued to strengthen.

Although shipments of manufactured goods by this country's 13 major competitors as a group continued to decelerate in the July-September quarter, their growth rate was nevertheless greater than the modest U.S. increase. The value of deliveries by foreign suppliers, adjusted for seasonal variation and exchange rate changes, climbed by 7 percent in the third quarter. This advance was led by especially buoyant increases of 24 percent by Canada and

18 percent by Austria. These were accompanied by rises of about 13 percent by Norway, Italy, the Netherlands, and Sweden. On the other hand, the exports of the United Kingdom, Switzerland, France, and Belgium-Luxembourg increased only modestly from the levels of the previous quarter.

Electric machinery was the only commodity group in which the U.S. share expanded—the fifth consecutive quarterly increase. Exports of a wide variety of electric machinery climbed, with those of power machinery and switchgear rising especially rapidly. Other advances were posted in U.S. sales of measuring and controlling instruments and telecommunications apparatus. At the same time, shipments by the other suppliers, except Italy and Japan, generally grew more slowly than those of the United States and the U.S. share rose to 23.8 percent.

The U.S. position dipped marginally, down one-tenth of a percentage point, in chemicals and also in basic manufactures, a group containing semimanufactured goods of various materials and certain finished metal products. The U.S. chemical share stood at 21.2 percent, virtually unchanged since early 1976 and well above its average level for 1975 as a whole. The value of chemical exports by the United States as well as most of its competitors, except Italy and the United Kingdom, was also little changed from the level of the previous quarter. Among individual products, the largest advance in U.S. chemical sales was in inorganic elements and oxides while the steepest decline occurred in plastics.

In basic manufactures, the U.S. position was relatively stable at 11.7 percent in the third quarter following a sizable decline in the previous period. Despite the sluggish U.S. export increase, the sales dip of the previous period was reversed. The major reasons were a recovery in U.S. shipments of nonferrous metals and buoyant exports of iron and steel plates and sheets. These advances more than offset sales declines in wood and cork manufactures and paper and paperboard.

The U.S. share of miscellaneous manufactured articles, a group consisting of nondurable consumer goods and professional and scientific instruments, declined again. Following a sizable fall during April-June, the U.S. position slipped more modestly to 17.7 percent in the third quarter of 1976. U.S. exports expanded slowly as deliveries of clothing and sound recorders and reproducers were little changed from levels of the previous quarter and those of scientific instruments climbed moderately.

The U.S. share in nonelectric machinery fell to 26.9 percent. Shipments by the other suppliers as a group expanded more rapidly than those of the United States despite declines in sales by Belgium-Luxembourg, France, and the Netherlands. Significant increases occurred, however, in U.S. deliveries of construction, excavating, and maintenance equipment, computers, materials handling equipment, and power generating equipment.

The United States reported its largest share decline in transport equipment, down more than a full percentage point to 23.2 percent. This slide more than offset the large rise recorded in the previous quarter for this traditionally volatile group. U.S. shipments decelerated sharply as a result of a leveling off in deliveries of automotive and aircraft products. In contrast, exports by competitors remained buoyant, particularly those of the Netherlands, Canada, Denmark, and Norway.

U.S. SHARE OF WORLD EXPORTS OF MANUFACTURES

Adjusted for seasonal variation

Commodity	U.S. exports (million dollars)	U.S. share* (% based on export-weighted exchange rates[1])
Manufactures, total		
1974	64,559	20.3
1975	72,118	21.3
1974 1st qtr.	14,273	20.4
2nd	15,825	19.8
3rd	16,861	20.1
4th	17,737	20.9
1975 1st	17,339	20.7
2nd	17,668	20.6
3rd	18,371	21.9
4th	18,880	21.8
1976 1st	18,405	20.6
2nd	19,542	20.6
3rd	20,071	20.3
Chemicals		
1974	8,891	18.5
1975	8,746	20.3
1974 1st qtr.	2,027	19.5
2nd	2,183	17.9
3rd	2,355	17.8
4th	2,332	18.9
1975 1st	2,336	19.8
2nd	2,097	19.3
3rd	2,080	21.1
4th	2,248	21.0
1976 1st	2,348	21.3
2nd	2,505	21.3
3rd	2,493	21.2
Nonelectric machinery		
1974	16,811	26.4
1975	21,088	27.5
1974 1st qtr.	3,639	25.8
2nd	3,987	26.5
3rd	4,434	26.3
4th	4,802	27.1
1975 1st	4,940	26.9
2nd	5,311	27.4
3rd	5,339	27.7
4th	5,504	28.1
1976 1st	5,318	26.5
2nd	5,549	27.2
3rd	5,565	26.9
Electric machinery		
1974	7,156	23.1
1975	7,771	22.6
1974 1st qtr.	1,606	23.0
2nd	1,743	22.6
3rd	1,925	23.8
4th	1,890	22.8
1975 1st	1,862	22.6
2nd	1,929	22.3
3rd	1,955	22.6
4th	2,021	22.7
1976 1st	2,173	22.8
2nd	2,329	23.4
3rd	2,525	23.8
Transport equipment		
1974	14,583	29.2
1975	17,281	28.1
1974 1st qtr.	3,153	30.2
2nd	3,522	27.7
3rd	3,697	28.8
4th	4,268	30.5
1975 1st	3,854	28.0
2nd	4,126	26.6
3rd	4,714	30.2
4th	4,673	27.6
1976 1st	4,028	23.9
2nd	4,621	24.6
3rd	4,850	23.2
Basic manufactures		
1974	11,490	12.3
1975	11,230	12.6
1974 1st qtr.	2,560	12.7
2nd	2,922	12.3
3rd	3,012	12.0
4th	3,012	12.2
1975 1st	2,835	12.1
2nd	2,747	12.0
3rd	2,791	12.8
4th	2,887	13.3
1976 1st	2,872	12.9
2nd	2,838	11.8
3rd	2,888	11.7
Miscellaneous manufactured articles		
1974	5,628	17.3
1975	6,002	17.6
1974 1st qtr.	1,288	17.5
2nd	1,468	17.8
3rd	1,438	17.0
4th	1,433	17.0
1975 1st	1,512	18.0
2nd	1,458	17.1
3rd	1,492	17.6
4th	1,547	17.8
1976 1st	1,666	18.3
2nd	1,700	17.9
3rd	1,750	17.7

Note: The term "manufactures" refers to chemicals, machinery, transport equipment, and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war, and ammunition. World exports are defined as exports from the 15 major industrial countries. Percentage shares are based on values excluding shipments to the United States. These nations, which account for 80 percent of world exports of manufactures to foreign markets, are: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan.

* Of world exports to foreign markets.

[1] Export-weighted exchange rate indexes are calculated for each supplier in each period, using official rates of exchange vis-a-vis 67 principal markets.

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Bureau's Office of International Trade Policy.

THE PRESIDENT

Import Relief: President Carter has determined that it would not be in the national economic interest to impose a tariff rate quota on imports of certain **mushrooms.** Such import restrictions had been recommended by the International Trade Commission (ITC) following its finding of import injury after an investigation, under section 201 (the "escape clause") of the Trade Act of 1974, regarding the effects of increased imports on the domestic industry. The President stated, however, that mushroom imports will be monitored and that expedited consideration will continue to be given to petitions for adjustment assistance.

The President noted that the chief foreign suppliers, Taiwan and Korea, have agreed to quantitatively limit their exports through June 30. In addition, these governments have given written assurances that, in the future, they will restrict their exports to avoid disrupting the U.S. market and the domestic industry.

Rhodesian Chrome: The President has signed legislation for reimposition of the embargo on U.S. imports of Rhodesian chrome and other strategic and critical material. (See CONGRESS section.)

Economic Summit: President Carter is expected to participate in an international meeting to be held in London May 7, 8 to discuss economic issues with representatives of Germany, France, Italy, Britain, Canada and Japan. Earlier meetings of this kind were held at Rambouillet, France in November, 1975 and in Puerto Rico in June, 1976.

CONGRESS

Rhodesian Chrome: Both the Senate and House have enacted, and the President has signed, H.R. 1746, as amended (originally considered by the Senate as S.174), which permits the reimposition of the embargo on U.S. imports of **Rhodesian chrome** and other strategic and critical materials which lapsed on Jan. 1, 1972. The amendments adopted by both houses would allow the President to suspend the import embargo if such suspension would encourage meaningful negotiations and peaceful transfer to majority rule by the Rhodesian Government, and exempt from the embargo shipments in transit to the United States on the date of enactment.

The Act also prohibits the importation into the United States of any steel mill product containing Rhodesian chrome. To enforce this prohibition, the Act requires a certificate of origin providing adequate evidence that such steel mill products do not contain Rhodesian chrome.

Congressional enactment followed public hearings and favorable reports on the legislation by the Senate Committee on Foreign Relations and the House Committee on International Relations.

Buy American Provisions: The Senate, in passing S.427, and the House, in passing H.R. 11, amending and extending the Local Public Works Capital Development and Investment Act of 1976, amended the legislation to include an identical requirement that all materials for local public works projects funded by the legislation be of domestic origin. The Secretary of Commerce may waive the requirement: 1) in the public interest; 2) for unreasonable costs; or 3) for the unavailability of domestic supplies. This authority is somewhat broader than the waiver authority for the Buy American Act requirement that all Federal public works use domestic materials.

Hearings-Senate: The Subcommittee on International Finance of the Senate Committee on Banking, Housing and Urban Affairs held hearings on S. 69 and S.92, extending and amending the **Export Administration Act.** In addition to extending the Act to Sept. 30, 1978, both bills contain measures to deal with national security export controls, nuclear proliferation, embargoes on American agricultural exports and the Arab boycott. Testimony was given by Secretary of State Cyrus Vance, Secretary of Commerce Juanita Kreps, and 17 other public and private witnesses on Feb. 21, 22, 28 and March 15.

The Subcommittee on Merchant Marine and Tourism of the Senate Committee on Commerce, Science and Transportation held hearings on S. 182, 568, 682, 715 and 898, to create mandatory safety requirements for all **oil tankers** that engage in U.S. or foreign commerce.

Committee Action-House: The Subcommittee on Trade of the House Ways and Means Committee has recommended that the full Committee report favorably the following bills: H.R. 422, to provide duty-free treatment for any **aircraft engine** used as a temporary replacement for an aircraft engine being overhauled within the United States if duty was paid on such replacement engine during a previous importation; H.R. 1401, to admit duty-free 33 **carillon bells** for the use of Smith College, Northampton, Mass.; and H.R. 3259, with technical amendments, to continue to suspend for a temporary period the import duty on certain **horses.**

The subcommittee, in its markup session March 1, passed over without prejudice: H.R. 2849, to suspend for a 3-year period the rate of duty on **mattress blanks of rubber latex;** H.R. 3364, to amend the Tariff Schedules of the U.S. in order to provide for the duty-free importation of loose **glass prisms** used in chandeliers and wall brackets; and H.R. 3373, to extend for an additional temporary period the existing suspension of duties on certain clasifications of **yarns of silk.**

Hearings-House: The House Committee on International Relations held hearings on H.R. 1501 and H.R. 1561, bills dealing with the **Export Administration Act.** Testimony was given for the Commerce Department by Secretary Kreps and Arthur Downey, Deputy Assistant Secretary of Commerce, and Director, Bureau of East-West Trade. During the March 7-10 hearings 15 other witnesses appeared.

Hearings were also held by the Subcommittee on Merchant Marine of the House Committee on Merchant Marine and Fisheries on H.R. 1037, **oil cargo** preference. Testimony was given by private and public witnesses.

New Legislation: In the first session of the 95th Congress 170 trade and related bills have been introduced. Those not previously reported in this column include: H.R. 3130, 4113, and 4230, to require that imported **meat and meat food products** made in whole or in part of imported meat be subject to certain tests and that such meat or products be identified as having been imported, to require the inspection of imported **dairy products** and that such products comply with certain minimum standards of sanitation, and to require that the cost of conducting such tests, inspections, and identification procedures be borne by the exporter; H.R. 3182 and 3760, to prohibit the importation of **handguns** except for or by members of the Armed Forces, law enforcement officials, and, as authorized by the Secretary of the Treasury, by licensed importers, manufacturers, dealers and pistol clubs; H.R. 3259, to continue to suspend for a temporary period the import duty on certain **horses.**

Also, H.R. 3350 and 4582, to promote the orderly development of **hard mineral resources** in the deep seabed, pending adoption of an international regime relating thereto; H.R. 3355, to require that **dairy products** which are imported be labeled to disclose such fact; H.R. 3364, to amend the Tariff Schedules of the U.S. in order to provide duty-free importation of **loose glass prisms** used in chandeliers;

H.R. 3373, to extend for an additional temporary period the existing suspension of duties on certain classifications of **yarns of silk**; H.R. 3387, to continue until the close of June 30, 1980, the existing suspension of duties on **synthetic rutile**; H.R. 3388, to amend item 603.70 of the Tariff Schedules of the U.S. as they relate to **synthetic rutile** as a titanium source material.

Also, H.R. 3451, 3452 and 3963, to provide the American consumer the assurance that foreign **dairy products** marketed in the U.S. meet the minimum standards of quality by requiring the inspection of these products at the U.S. ports of entry, at the foreign milk processing plants which provide dairy products for export to the U.S., and at the foreign dairy farms which supply milk to foreign milk processing plants for the production of dairy products to be exported to the U.S.; H.R. 3669, to assure the availability of adequate supplies of **natural gas** at reasonable prices for consumers; H.R. 3673, to require that **imported palm oil** and **palm oil products** made in whole or in part of imported palm oil be labeled, to provide for the inspection of imported palm oil and palm oil products, and to require that such products comply with certain minimum standards of sanitation; H.R. 3674, to amend the Tariff Schedules of the U.S. with respect to the rates of duty on **palm oil**; H.R. 3748, to amend the Tariff Schedules of the U.S. in regard to **item 807.00**; H.R. 3790, to suspend until the close of June 30, 1980, the duty on concentrate of **poppy straw** used in producing codeine or morphine; H.R. 3946, to suspend for a temporary period the rate of duty on certain **wool**; H.R. 3977, 4337, and 4057, to require that a percentage of U.S. **oil imports** be carried on U.S. flag vessels.

Also, H.R. 4018, to suspend until the close of June 30, 1979, the duty on certain **doxorubicin hydrochloride antibiotics**; H.R. 4024, 4025, 4026, 4027, and 4717, to amend the United Nations Participation Act of 1945 to halt the importation of **Rhodesian chrome**; H.R. 4144, to extend and amend the **Export Administration Act of 1969**; H.R. 4148 and S.843, to amend the Tariff Schedules of the U.S. to permit the free entry of **Canadian petroleum** (including reconstituted crude petroleum) and crude shale oil, provided that an equivalent amount of the same kind and quality of domestic crude petroleum and crude shale oil has been exported to Canada; H.R. 4317, 4410, and 4618, to amend the **Export Administration Act of 1969** in order to extend the authorities of that Act and improve the administration of export controls under that Act, to strengthen the antiboycott provisions of that Act, and to provide for stricter controls over exports of nuclear material and technology; H.R. 4352, to prohibit companies from participating in the **boycott** of another U.S. company or a country friendly to the United States, or providing information in response to a foreign country's request.

Also, H.R. 4361, to provide for certain import restrictions against enterprises engaged in prohibited **whaling** activities; H.R. 4460 and S. 939, to amend the **worker adjustment assistance** provisions of the Trade Act of 1974 in order to provide that workers may be covered under certification of eligibility to apply for such assistance if they are totally or partially separated from adversely affected employment within two years before the date of the petition for such certification; H.R. 4581, to amend the **worker adjustment assistance** provisions of the Trade Act of 1974 in order to provide that workers may be covered under certification of eligibility to apply for such assistance if they are totally or partially separated from adversely affected employment within one year before the date of the petition for such certification.

Also, H.R. 4654, to reduce the rate of duty on **unmounted underwater lenses**; H.R. 4788, to permit until July 1, 1980, the duty-free entry of **Tricot and Raschel warp knitting machines**; H.Res. 300, to express the sense of the House relative to foreign **palm oil** development loans; H.Res. 301, to express the sense of the House **relative to a** study by the Secretary of Agriculture on **palm oil products**; H.Res. 320, to express the sense of the House with respect to the immediate removal of certain regulations unilaterally put in place by the European Economic Community which have the effect of damaging and interfering with historic and acceptable trade patterns in U.S. exports of **dried prunes** and efforts made to restrict exports of **walnuts** to the European Economic Community; H.Con.Res. 136, disapproving the President's action under section 203 of the Trade Act of 1974 (Aug. 28, 1976) allowing import relief on **stainless steel flatware** to terminate.

Also, S.674, to reinstate the provisions of the **Sugar Act of 1948** beginning with calendar year 1978; S. 677, to amend the Tariff Schedules of the U.S. to raise the value limit for **personal articles** which may be imported duty-free by returning residents; S. 682, 715, and 898, to provide for increased safety of all **tankers** operating in U.S. waters and increase the share of U.S. vessel participation in the carriage of imported oil; S.683, to amend the Tariff Act of 1930 and the Tariff Schedules of the U.S. to reduce the burden of paperwork involved in the **customs entry process** for travelers and goods entering the U.S.; S.710, to amend the **Export Administration Act**; S. 812, to improve the quality of **unshelled and shelled filberts** for marketing in the U.S.

Also, S. 814, to amend the Tariff Schedules of the U.S. to provide duty-free treatment of any **aircraft engine** used as a temporary replacement for an aircraft engine being overhauled within the U.S. if duty was paid on such replacement engine during a previous importation; S. 825, **Voluntary Standards and Accreditation Act**, to insure that private standards developers, product testers, and certifiers conduct their activities in a manner consistent with U.S. antitrust laws and consumer protection policies; and S. 915, to require an estimate of domestic consumer needs and domestic production of **sugar**, to provide an annual quota of sugar which may be brought or imported into the U.S.

SPECIAL TRADE REPRESNTATIVE

Section 301—Foreign Trade Practices: The Office of the President's Special Trade Representative (STR) has begun review of a petition, filed under the provisions of section 301 of The Trade Act of 1974, alleging that Japan is discriminating against U.S. commerce in **thrown silk** by effectively preventing the entry of such imports from the U.S. while permitting imports from certain other countries. Violations of obligations under both the General Agreement on Tariffs and Trade (GATT) and the International Monetary Fund (IMF) are alleged. A hearing will be held March 29.

TREASURY DEPARTMENT

Antidumping Cases: The Treasury Department has announced its final determination that **monosodium glutamate** from the Republic of Korea is not being sold at less-than-fair-value within the meaning of the Antidumping Act. This finding follows a preliminary determination to the same effect issued in November, 1976.

The Department also has announced that customs appraisement is being withheld on **pressure sensitive plastic tape** imported from Italy, except that produced by Plasturopa. The order, based on a finding of reasonable grounds to suspect sales at less-than-fair-value, will continue in effect for six months unless terminated before then by a negative determination in the antidumping investigation.

In other dumping action, Treasury has issued tentative determinations to revoke or modify five previously issued dumping findings. The findings involve **clear sheet glass, tuners** (of the type used in consumer electronic products) and **clear plate and float glass** from Japan, **potassium chloride** from Canada, and **cast iron soil pipe** from Poland.

Countervailing Duty Cases: The Department has reinstituted a countervailing duty investigation of **non-rubber footwear** from Argentina. This action follows

receipt of information tending to indicate that a law has been passed in Argentina that provides for a 15 percent export subsidy on the subject product. A previous investigation into other possible subsidization of such exports ended in early 1976 with a negative determination.

Another new investigation has been instituted to determine whether bounties or grants are being paid on imports of **iron and steel chain and parts** from Spain.

Two countervailing duty orders previously issued have been reconsidered, resulting in the termination of one and modification of the other. The Department has found that bounties or grants are no longer being paid on the exportation of **spirits** from Great Britain and has rescinded the countervailing duty order. Regarding **float glass** from Italy, the Treasury finding on the amount of subsidization on behalf of Societa Italiana Vetro has been changed to zero percent, effective retroactively to Jan. 7, 1976 (the date the determination was published). As a result, countervailing duties will not be imposed on U.S. imports of float glass exported by Societa Italiana Vetro. However, the decision does not apply to exports by the Italian firm, Fabrica Pisaria, on which countervailing duties continue.

LABOR DEPARTMENT

Adjustment Assistance Certifications: The Labor Department, having found that workers at certain firms have been or may become unemployed as a result of increased imports, has certified workers at those firms as eligible to apply for adjustment assistance. Adjustment assistance, under the provisions of the Trade Act of 1974, may include cash trade readjustment allowances, training, testing, counseling, job placement, job search grants and relocation allowances.

The workers certified (numbers where available are approximate) are or have been employees of the following firms: H. A. Seinsheimer Co., Cincinnati, and New Albany, Ind. **(men's suits, sport coats, trousers and leisure suits)** 450; Selbern Shoe Co., Inc., Farmington, N.H. **(women's shoes)** 210; Piher Corp., Woburn, Mass. **(carbon film resistors)** 120; R. J. Widen Co., Inc., North Adams, Mass. **(garment, accessory, and tanned leather)**; William P. Goldman and Brothers, Inc., Brooklyn **(men's suits and sport coats)** 100; Dadson Knitting Mills, Inc., Brooklyn **(women's sweaters)** 20; Boonton Handbag Co., Inc., Boonton, N.J. **(vinyl handbags)** 75; Irving Leicht, Inc., Neptune, N.J. **(women's suits)** 50; Americana Coat Co., Inc., Jersey City, N.J. **(children's and women's coats)** 25; Maidenform, Inc., Clarksburg, W.Va. **(brassieres)** 70; Rose-Lin of California, Los Angeles **(women's coats)** 40; Caribbean Leather Products, Inc., Mayaguez, P. R. **(women's sandals)** 40; E and W of Dover, Inc., Dover, Tenn. **(work pants)** 8.

Also, Phoenix Clothes, Division of Genesco, Inc., Shippensburg, Pa. **(men's suit pants)** 3; J. F. McElwain Co., D-Factory, Manchester, N.H. **(men's cement dress shoes)** 165; River Falls Mfg. Co., Fall River, Mass. **(children's outerwear)** 130; Fields Clothes, Inc., New York **(children's outerwear)** 5; Bernard Screen Printing Corp., New Hyde Park, N.Y. **(printed textiles)** 150; LaCrosse Rubber Mills Co., La Crosse, Wis. **(rubber and rubber/canvas footwear)** 125; Sun Weld Fitting Co., Los Angeles **(stainless steel valves)** 50; Westinghouse Electric Corp., Entertainment Tube Division, Horseheads, N.Y. **(color television picture tubes)** 1200; Chester Pants Corp., Brooklyn **(men's suits)** 10; Bata Shoe, Salem, Ind. **(rubber/canvas footwear)** 165.

Denials: The Department denied petitions for trade adjustment assistance for workers of the following companies: Phoenix Clothes, Division of Genesco, Inc., Shippensburg, Pa. **(men's vests)**; Westinghouse Electric Corp., Industrial and Government Tube Division, Horseheads, N.Y. **(military electronic devices)** 25; TRW Metals Division of TRW, Inc., Minerva, Ohio **(investment castings for turbine engines)** 1000; Lockheed-California Co., Minot, N.D. **(air frame subassemblies for wide-bodied jet aircraft)** 50; Standard Glove Co. of New Jersey, Inc., Newark **(textile work gloves)** 15; Sette Products Co., Oakland, Calif. **(barrel faucets)** 7; DeLaval Turbine, Los Angeles **(valves, controls)**; Galland Henning Nopak, Inc., Milwaukee **(scrap steel processing equipment, metal cutting shears, pneumatic and fluid drive equipment and parts, and valves)**; Jackson-Marcus Supply Co., Los Angeles **(valves, flanges, fittings)**; Memphis Nipple Co., Horn Lake, Miss. **(carbon steel pipe nipples)**; Libby Originals, Inc., Brooklyn **(sportswear)**.

Also, Fisher Controls Co., Coraopolis, Pa. **(automatic control valves)**; Triangle Pipe and Tube Co., New Brunswick, N.J. **(copper tubing)** 140; Teledyne McKay, York, Pa. **(chains, welding, rods, and electrodes)** 100; Windsor Waist and Dress Co., Philadelphia **(women's sportswear)**; Stone Art, Inc., Racine, Wis. **(flower pots)** 10; Acme Nipple Mfg. Co., Buffalo **(pipe fittings and nipples)**; American Foundry and Mfg. Co., St. Louis **(fire and yard hydrants, utility castings, manhole covers, and drainage gates)**; Hawaiian Western Steel Ltd., Ewa Beach, Hawaii **(reinforcing steel and bars)**; Warner Gear Corp., Muncie, Ind. **(secretarial services)**; Sperry Univac, Utica, N.Y. **(electronic data processing equipment, excluding punch and die assemblies)** 1500; Carr Leather Co., Lynn, Mass. **(tanned and finished cattle hides)** 45; Shenango, Inc., Sharpsville, Pa. **(ingot molds)**; Koppers Co., Inc., Erie, Pa. **(coke)**; Fasteners Sales Co., Chicago **(parts for counter top fasteners)** 1; Auto Handling Division of Freight Consolidated Services, Inc., Edison, N.J. **(transportation services)**.

Four escape clause cases occupy public attention, following import injury findings by the International Trade Commission:

- **Non-rubber footwear, awaiting Presidential action.**
- **Television receivers, awaiting Presidential action.**
- **Sugar, awaiting Presidential action.**
- **Mushrooms, got Presidential response (see page 18).**

Also, National Steel Corp., Midwest Steel Division, Portage, Ind. **(carbon steel sheet products)**; Chattanooga Coke and Chemical Co., Inc., Chattanooga, Tenn. **(coke)**; Brown Shoe Co., Caruthersville, Mo. **(women's shoes)** 250; Missouri Rolling Mill Corp., St. Louis **(merchant bars)**; E. T. Wright, Rockland, Mass. **(men's shoes)** 180; Manchester Coat Co., Manchester ,N.H. **(women's coats)** 45; The Villager Industries, Inc. Cornwell Heights, Pa. **(women's clothing)** 20; Vulcan Corp., Walnut Ridge, Ark. **(shoe lasts)**; Vulcan Corp., Kenton, Tenn. **(shoe heels)**; North Star Steel Co., St. Paul, Minn. **(reinforced rods, round angles)**; Kenosha Cartage Co., Inc., Kenosha, Wis. **(transportation services)**; A.R.A. Services of Southern Wisconsin, Kenosha, Wis. **(vending machine services)**; Gulf and Western Industries, Stainless and Alloy Division, Somerville, N.J. **(pipes and piping components)**; Hydril Co., Houston **(tubing and castings)**; Continental Pipe, Chicago **(pipe fittings)**;

Also, Hunt Valve Co., Inc., Salem, Ohio **(hydraulic valves)**; International Basic Economic Corp., Bellows International Division, Morgan Ave. Plant, Akron, Ohio **(valves)**; Allied Chemical Corp., Semet Salvay Division, Detroit, **(coke)**; Davjo Mfg. Co., Philadelphia **(misses' dresses)** 115; Jay El Dress Co., Philadelphia **(women's dresses)** 35; Bleecker Street, Inc., Philadelphia **(women's dresses)** 10; La Salle Cutting and Mfg. Co., Inc., Pittston, Pa. **(women's and misses' dresses and sportswear)**; Shenango, Inc., Neville, Pa. **(coke and pig iron)**; Laverly, Inc., New York **(men's sport coats, suits and leisure suits)**; Donner-Hanna Coke Corp., Buffalo, N.Y. **(coke and by-products)**; B.I.F., West Warwick, R.I. **(water and wastewater treatment and industrial processes)**; International Shoe Co., Box Department, St. Louis **(shoe boxes)** 5; ITT Grinnell Corp., Princeton, Ky. **(pipe fittings, alloy elbows, tees, flanges, and reducers)**; Homestake Copper Co., Calu-

met, Mich. **(copper concentrates)**; Mueller Co., Chattanooga, Tenn. **(fire hydrants, gate valves)**; and Lone Star Steel Co., Lone Star, Tex. **(oil field pipes)**.

Revisions: The Department has issued two revised determinations of eligibility to apply for trade adjustment assistance, involving workers at plants in Ohio and Missouri. Following an earlier denial of a petition for eligibility filed on behalf of workers at the Republic Steel Corp.'s Canton South Plant in Canton, Ohio, the Department of Labor investigated further and found additional information which indicated that increased imports of **stainless steel products** did in fact contribute importantly to the unemployment of certain workers at the plant. The investigation also indicated, however, that increased imports of **alloy steels and stainless steel** did not contribute to the unemployment of certain other workers who petitioned for eligibility based on those imports. Approximately 250 workers at Republic were certified as eligible to apply.

The other revision affected the certification of eligibility for workers in the production of **men's footwear** at the International Shoe Co. plant in Perryville, Mo. The revised certification, renewing and extending the original certification which expired on May 1, 1975, permits eligibility for all workers who have become unemployed since Oct. 3, 1974.

Report on Mushroom Industry: A new Labor Department study indicates that few workers engaged in the growing or processing of **mushrooms** are likely to apply for trade adjustment assistance over the next year. The study was conducted pursuant to section 224 of The Trade Act of 1974 following the International Trade Commission's initiation of a section 201 import relief investigation.

Investigations: The Department has recently initiated a series of investigations to determine whether workers at approximately 95 plants are eligible to apply for adjustment assistance. Industries substantially involved include **clothing, footwear** and **shrimping.**

INT'L TRADE COMMISSION

Section 201—Import Relief: The International Trade Commission (ITC) has recommended that import restrictions be imposed to remedy import injury sustained by U.S. producers of **television receivers** and **sugar.** The findings of injury and the remedy recommendations resulted from investigations conducted under the provisions of section 201 (the "escape clause") of the Trade Act of 1974. U.S. imports of sugar were valued at approximately $1.2 billion in 1976 and of television receivers at about $821 million.

In the television case, the Commission recommended that the present 5 percent tariff be increased to 25 percent for a two-year period, then be set at 20 percent for the following two years, 15 percent for the fifth year and returned to the current 5 percent rate thereafter.

Regarding sugar, while all six commissioners voted in favor of quotas, three (constituting the statutary majority recommendation) recommended a quota of 4.275 million short tons per calendar year through 1981. The other three recommended a limit of 4.4 million short tons per "twelve-month period," with two commissioners voting for continuation through 1979, and one through 1981. The President must decide within 60 days of receipt of the Commission's report for each investigation whether he will proclaim the recommended relief or take some other action.

In other "escape clause" actions, the ITC has opened its 23rd investigation under section 201 to determine whether certain **headwear,** not knit, of cotton flax or manmade fibers is being imported into the United States in such increased quantities as to be a substantial cause of serious injury.

Public hearings in connection with the investigation will begin May 17 in New York City and May 26 in St. Louis, at times and locations to be announced later. Requests for appearances should be filed in writing with the Secretary, United States International Trade Commission. 701 E Street, NW., Washington, D.C. 20416 no later than noon of the fifth calendar day preceding the hearing. Also, a hearing will be held on April 5 in Pittsburgh, at a time and place to be announced, for the investigation concerning **low carbon ferrochromium.**

Section 203: Termination of Import Relief: The ITC advised the President on Feb. 14 that the termination of annual quotas on imports of certain **alloy tool steel** (bearing steel) would have little effect on U.S. producers in view of the fact that less than half the amount allowed entry under existing quotas is now being imported. The advice followed an ITC investigation, conducted at the request of the President's Special Trade Representative, to determine the probable economic effect of excluding this steel from the quotas imposed by Presidential Proclamation following an "escape clause" finding of import injury to the specialty steel industry. (See June 21 issue).

Section 337—Unfair Trade Practices: Following receipt of allegations of patent infringement, the ITC has instituted an investigation under section 337 of the Tariff Act of 1930, to determine the existence of unfair methods of competition and unfair acts in the importation of **hexahedron-shaped devices for display of photographs.** The complainant further alleges that the effect or tendency of the unfair acts is to destroy or substantially injure a domestic industry and requests that the imports in question be permanently excluded from entry into the United States.

In other section 337 action, the ITC has announced that it will hold hearings beginning March 29 in the investigation regarding certain **exercising devices** and beginning April 1 regarding certain **above-ground swimming pools.** Oral arguments will be heard concerning the recommended determinations of the presiding officers who found a valid U.S. patent infringed in each case. The hearings will also deal with information and arguments concerning appropriate relief and bonding procedures. In addition, consideration will be given to whether the public interest factors set forth in section 337(d) and (f) of the statute would warrant a determination by the ITC not to impose relief were the Commission to find unfair import practices in violation of the statute.

Reports: The Commission has issued reports on **cast-iron household stoves** and parts thereof and **permanent-magnet direct current motors,** pursuant to last year's request from President Ford that the ITC conduct investigations under section 332(g) of the Tariff Act of 1930, to aid the Executive Branch's Trade Policy Staff Committee in the review of petitions for removal of these products from the list of articles eligible for duty-free treatment under the Generalized System of Preferences (GSP). The reports contain information on the economic situation of the relevant domestic industries and on imports.

INTERNATIONAL

Foreign Antidumping Actions: The Government of Canada has announced a final affirmative determination of dumping following an investigation of **gasoline powered chain saws** manufactured in the United States. Additional duties will be assessed on the subject goods.

In other Canadian actions, the Anti-dumping Tribunal, following preliminary affirmative dumping findings, has recently initiated inquiry in two cases to ascertain whether or not material injury has resulted from sales at less-than-fair value. The U.S. products involved are **surgical gloves** and **certain chemicals,** including **calcium propionate, sodium propionate** and **sodium benzoate.**

The Anti-dumping Tribunal recently concluded two other investigations regarding U.S. exports to Canada. In the first, involving **bacteriological culture media,** the Tribunal found that no injury to Canadian production was caused by sales at less-than-fair-value. In the second, concerning the dumping of **textured**

or bulked polyester filament yarn, an injury finding was made only on yarn of up to 200 deniers, and antidumping duties will be assessed only on U.S. exports of such yarn.

Finally, in Australia, the Bureau of Customs dropped for lack of evidence an investigation into alleged dumping of **glasscloth** from the United States.

International Safeguards Actions: The Government of Canada has announced the extension for an additional three years of a global quota on imports of **double knit fabrics.** The original quota was imposed for a six-month period following a finding by the Textile and Clothing Board that imports were having an injurious effect on Canadian producers of like goods, and was due to expire on April 8 (See Nov. 22 issue).

In Australia, temporary tariff quotas were recently imposed on imports of **certain bench or pedestal drilling machines.** The action follows a recommendation of the Australian Temporary Assistance Authority and will be effective while the industry's long-term needs are probed.

Also in Australia, quotas which were due to expire on Feb. 28 on imports of **certain textiles and fabrics,** have been continued, and new tariff quotas have been introduced on imports of **towelling and knitted pile fabrics** of man-made fibers.

In Switzerland, licensing actions taken to limit imports of **certain bottled white wines** have been extended through 1977. The extension was issued on the basis that a sound market situation has not yet been realized.

Finally, the European Community has given notice that it intends to terminate as of April 1 its system of protective measures taken as an emergency action on **certain bovine meat.**

Trade Fairs In Poland, '77

U.S. businessmen considering export possibilities in Eastern Europe are invited to participate in exhibitions scheduled for Poland later this year. The Poznan International Fair, June 12-21, is a general industrial exhibition. As in previous years, the Commerce Department is sponsoring a pavilion. The following specialized fairs are scheduled for Oct 16-23: CHEMIA, chemical consumer products; FOTOKINOTECHNICA, photographic and cinematographic equipment; POLIGRAFIA, printing equipment; and TAROPAK, packaging, handling, and storage equipment, at which Commerce is sponsoring a Business Development Office. Application deadline is May 1.

Details are available from: Poznan Int'l Fair Management, Glogowska 14, 60-734, Poznan (phone, 612-21; telex, 0415210); or from Commerce's Bureau of East-West Trade, Room 4325, Washington, D.C. 20230 (phone, 202-377-2645).

MISSION TO ISRAEL, IRAN FINDS EAGER CUSTOMERS FOR BUILDING EQUIPMENT

"Unexpectedly large requirements for building products and construction equipment in both countries" is the message of a U.S. trade mission just back from Israel and Iran.

Though Israel's construction industry is currently in a period of restraint because of economic conditions, the seven U.S. company executives visiting Israel for the first time uniformly found an excellent market for their products. In Iran, according to Mission Director Don Ryan of the Commerce Department, "the level of construction activity has to be seen to be believed." This extends through the residential, commercial, and industrial sectors, with the only evident limit the availability of materials and labor, Ryan notes.

Israel displayed a desire to buy American whenever possible, the mission found. "Help us figure out how we can buy what you make," customers seemed to be saying. And mission member Bill Young of Young Door Co., Plymouth, Ind., commented, "This is the first time in my business career that a potential customer has taken me to lunch!"

Another unexpected feature of the strong Israeli demand for construction equipment is the country's emergence as a point of entry to African markets.

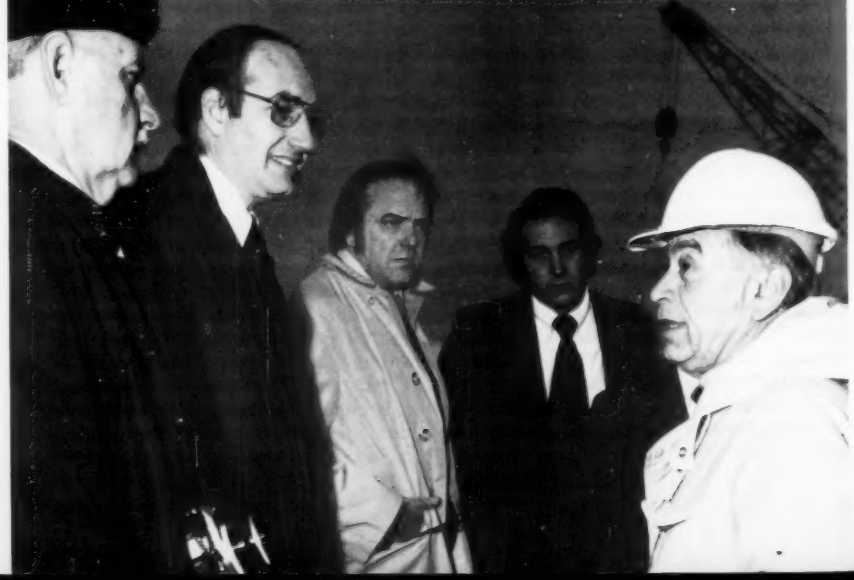
The mission looks forward to more than $5 million in export sales to Israel in the coming year, as a result of the visit. The group expects to sell a concrete pipe plant, a variety of wood products, a window factory, windows for a project in Africa being carried out by an Israeli firm, a plant to produce straddle-lift transporters, pipe tools, rebar fabrication equipment, a door plant in Israel and one in Nigeria, and a large quantity of doors.

In Iran, the mission participants found themselves "queueing up" to take their turns among vendors from everywhere. Although the public sector contributes a major portion of the current construction, the U.S. companies drew stronger response in the private sector.

For the products of the mission firms, the main thrust in Iran was toward the purchase of turn-key operations rather than for joint ventures. Immediate availability of equipment and materials is a key factor; and as the country's port congestion continues, the group determined that overland routes through Turkey would assure prompt transit. The members reported good potential for wood products—although previous market analysis had indicated poor prospects, because of price competition. Products the group expects to sell include pipe tools, foam panel plants, steel doors, tunnel steel, rebar fabrication equipment, steel concrete forms, a door plant, wood doors, cut stock for doors, and a concrete pipe plant. Orders written in Iran amounted to $2.4 million, and 12-month projected sales by the group total $16.5 million.

U.S. companies comprising the trade mission, and their representatives, were: Concrete Pipe Machinery Co., Sioux City, Iowa, Frank LaDue; Hearin Forest Industries, Portland, Ore., Joe Hearin; Insul-Lite Industries, Inc., Moultrie, Ga., James J. Barrett; Kornylak Corp., Hamilton, Ohio, Andrew T. Kornylak; Reed International Sales Co., Erie, Pa., Ross P. Wright; Republic Steel Corp., Cleveland, Ohio, Bruce L. Balogh; Schenck Corp., York, Pa., Frank W. Senft; Symons Corp., Des Plaines, Ill., H. L. Slough; Young Door Co., Plymouth, Ind., William S. Young.

MISSION IN IRAN—*U.S. construction materials and equipment suppliers visit building site in Tehran. From left: mission members Frank Senft, Ross Wright, James Barrett, Bruce Balogh; and Art Radice of Starrett Corp., a U.S. builder in Iran.*



MEETINGS IN MIDEAST—*U.S. EDP technical sales seminar group that recently visited four countries drew a "full house" for its presentations in Kuwait, above.*

GOVERNMENTS, OIL FIRMS TOP EDP USERS, SEMINAR TEAM TO MIDEAST FINDS

In four Middle Eastern countries just visited by a U.S. technical sales seminar team, governments constitute the largest EDP market. The group found Iraq an advanced market, and the private sectors in Saudi Arabia, Kuwait, and Bahrain keenly interested—with petroleum and petrochemical companies among the major users.

The eight-member team, comprised of U.S. company officials and organized by the Commerce Department, presented papers on computer hardware and software, data communications, and EDP management. The past, present, and future of data processing were appraised by Dr. Dick B. Simmons, the group's leader. Simmons is director of the computer center at Texas A & M University.

The team's appearance in Baghdad was sponsored by Iraq's National Computer Center, which oversees the procurement and development of major data processing systems in that country. Some 40 computers are now installed; 100 are expected to be in place by 1980. IBM and NCR supplied most of the country's early installations. More recently, Honeywell has entered the market. The U.S. company officials had high praise for the professional skills and knowledge displayed by the EDP personnel they met—most of whom had been trained in England or the United States. In Iraq, as elsewhere along the team's route, the market for minicomputers is developing rapidly.

A highlight of the Iraq visit was a tour of the Central Statistical Bureau's computer center, an NCR installation. The Bureau is preparing to conduct a national census, using data processing methods. Among problems to be solved in taking the census is the dearth of surnames and the absence of street names and addresses except for the main thoroughfares in the cities.

Another major concern, particularly in Iraq and Saudi Arabia, is the lack of high quality, modern transmission lines and networks needed for development of data communications systems. Audiences in both countries displayed strong interest in the seminar presentations on this subject.

The group participated in Saudi Arabia's third national computer conference in Jidda, with EDP personnel from throughout the country and from neighboring countries attending.

The seminar members scored $950,000 in immediate sales, and estimate upwards of $30 million in 12-month orders. Five joint-venture agreements are anticipated, as well as six sales representative appointments. Participants were: George Arrowsmith, Boeing Aerosystems Int'l, Seattle; Alfred Young, Codex Corp., Newton, Mass.; Michael Gallagher, Data General Corp. regional office, Athens, Greece; Theodore Ryan, Electronic Data Systems (Dallas) group attached to King Abdulaziz University, Jidda; Will King Gillies, Cii Honeywell Bull, Paris, subsidiary of Honeywell Corp., Minneapolis; Patrick McGovern, Int'l Data Corp., Waltham, Mass., and Ian Graham, Memorex Corp.'s Santa Clara, Calif., division.

French Looking For U.S. Technological Innovations In Microwave Components

The French market for microwave components and instrumentation is highly developed and French buyers continue to look to American suppliers to provide the latest technological innovations. This was apparent during a recent exhibition of such equipment at the Paris U.S. Trade Center.

Almost a thousand engineers and other trade visitors viewed the sophisticated U.S. products manufactured for telecommunications, radar, aerospace, research, and military applications.

As a result of this exhibition, an annual event, participating firms and their French representatives wrote orders worth $185,000 and projected sales in France of more than $4 million for the coming year. Five firms, new to the French market, participated on a special basis and projected almost $400,000 in new export sales over the next 12 months.

U.S. TRADE CENTER, PARIS—*At the recent microwave equipment show, trade visitors in the exhibition hall kept the booths humming with activity.*

BETTER BUSINESS SYSTEMS—*At the Tehran U.S. Trade Center show, an exhibitor demonstrates a page printer to an interested Iranian visitor.*

BUSINESS EQUIPMENT MARKET IN IRAN: GROWTH TO CONTINUE THROUGH '70s

Demand for business equipment in Iran has increased spectacularly over the last three years, and growth is expected to continue through the end of this decade. Thus, exhibitors at the Tehran U.S. Trade Center's business equipment and systems show late last year found good reason to be enthusiastic about their future prospects.

Twenty-three exhibitors representing 26 companies reported floor sales of $861,500, and projected 12-month orders at some $18.5 million. Ten representation agreements were signed during the show; eight more are under negotiation.

All equipment involving graphic displays which incorporated a Farsi character capability attracted the most attention. Among products offering the best potential were video display terminals, basic office equipment, modems, intelligent terminals, micro- and mini-computers, high-speed printers, peripherals, microfilm/microfiche equipment, and electric typewriters.

U.S. equipment in the computer and peripheral field enjoys a reputation in Iran as being the most desirable in reliability and technology. Products displayed were generally price competitive with similar products from third countries. A substantial number, however, were seen for the first time in Iran, and for these also, with virtually no competition worldwide, pricing is not expected to be a compelling factor.

Many exhibitors noted the relatively unsophisticated level of the computer-related market, and the need to educate end users on the potentials and desirability of what might be termed "non-traditional" applications. Within the private sector, computer-related equipment is only now beginning to be used beyond payroll and accounting operations. The public sector use of such equipment is already approaching sophisticated levels.

Scientific Instrumentation Technology As Problem Solver Spurs Sales At London Show

British instrumentation specialists were taken on a truly "far out" scientific venture—man's exploration of Mars—at a recent U.S. Trade Center exhibition in London.

Dr. James S. Martin, Jr., then project manager of NASA's Viking Mars Mission, opened USALAB '76, an exhibition of scientific and industrial laboratory instruments, and chaired a technical conference there the following day. The cooperation of NASA and Martin helped to yield concrete results for the 47 exhibitors: they generated $779,850 in immediate sales, with an additional $6.5 million expected to follow within the next 12 months.

U.S. firms are the leading import suppliers of automatic analyzers, gas chromatographs, oscilloscopes, and atomic absorption spectrophotometers, and have obtained a large share of the British market through their technological superiority. The British market for analytical instruments for science and industry was valued at $85 million in 1974. Expanding technology, increased investments by industrial and government laboratories, and a general economic recovery should push the market to $100 million in 1979. Imports from the United States, which account for more than 25 percent of the total market, are expected to jump from $22 million in 1974 to $32 million in 1979.

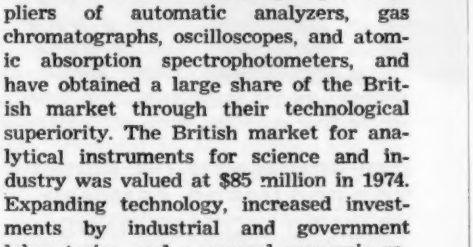
Automated Business Machines At U.K., Paris Exhibitions Calculate Sizable Orders

Automated business machines and systems were the focus of "tandem" exhibitions at the Paris and London U.S. Trade Centers last month—events that confirmed the continuing strength of the two markets for such equipment. About 20 firms participated in each show, and as one immediately followed the other, 10 firms—five of them new to these markets—participated in both.

American suppliers have a significant share of the French business equipment market, especially for advanced and sophisticated products. Imports account for about 85 percent of the market, and are expected to maintain this high share. Projected U.S. sales for the coming year as a result of the Paris show are estimated at about $4 million—a large portion of which reflect the leasing of equipment and thus understates the true value, according to Trade Center Officials. Huron Copysette, Leitchfield, Ky., one of the new-to-market participants, appointed two agents and expects to appoint two more soon.

As for the U.K. market, in 1974 U.S. suppliers furnished $43.8 million, or 16 percent, of total imports of business equipment. Their share is predicted to increase to about 18 percent by 1979, representing more than $95 million, as growing demand for advanced equipment enhances sales prospects for U.S. manufacturers. More than $1 million worth of sales were concluded during the exhibition in London, and $14 million in orders are expected within the next year. Four representatives were appointed; under negotiation, 12.

Although new-to-market exhibitors constituted less than half of the show's total complement, they generated 58 percent of immediate sales and fully two-thirds of the 12-month projection. Among the machines attracting top interest was a New Jersey firm's Vydec Word Processing System—an automatic text-editing typewriter with flexible disc storage and independent printer.



TANDEM SHOW—*Half the firms exhibiting in this U.S. business machines show in Paris exhibited also in London. Above, sales managers demonstrate Ventek's visual display memory capacity unit.*

COFFEE LEADS THE WAY IN COLOMBIAN UPSWING; DOOR OPEN TO IMPORTS

Dramatically increased foreign exchange reserves, liberalized import regulations, and a rapidly growing economy are the kingpins in the significantly improved trade outlook for U.S. exports to Colombia during 1977, according to Joseph L. Smith, Commercial Attache at the U.S. Embassy in Bogota.

Foreign exchange reserves almost doubled during the past year, reaching a total of more than $1 billion in December. This increase was due in large part to the record high coffee prices on the world market, which almost single-handedly brought about a swing from a balance of payments deficit of $17.8 million in 1975 to a payments surplus of over $500 million in 1976. This situation encouraged the Colombian Government to further liberalize its import regulations by reducing the number of products requiring prior import license approval.

During the year the rate of GNP growth reached 7 percent. At the same time, the inflation rate increased by about 7 percent over the 1975 figure to reach 26 percent for the year. The economy is expected to grow by 7-8 percent in 1977, with inflation nosing up slightly to a rate of about 30 percent. The peso continued to weaken gradually against the dollar, moving from 32.96 to 36.35 pesos per dollar during 1976.

Equipment categories which offer the highest potential for increased U.S. export sales to Colombia are: electric energy systems, agricultural, telecommunications, textile, health care, and printing and graphic arts.

Sales prospects for electric energy systems equipment will remain very good during 1977. Although several projects which were in the planning stage last year have been delayed due to technical and financial difficulties, the government has decided to go ahead on three other major projects: San Carlos I (620 MW), Mesitas I (400 MW) and Chivor II (500 MW). Feasibility studies have been completed and construction is expected to begin on the following four additional priority projects during the next four years: San Carlos II (740 MW), Salvajina (210 MW), Urra (1,070 MW in two stages), and Cerrejon coal operated thermal plant (125 MW). Despite financial problems, recent electric supply shortages caused by the dry weather have convinced the government that the financial difficulties must be overcome and that work on the projects must move ahead on schedule. Thus, the electric energy sector will offer excellent opportunities for U.S. exports of electric generation and transmission equipment for the foreseeable future.

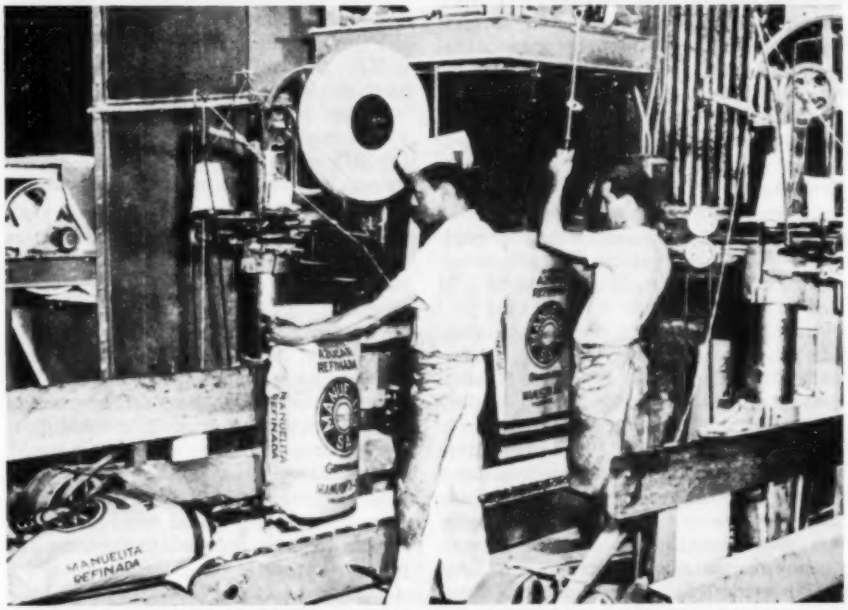
Essentially an agricultural country, Colombia is the most important agricultural producer of the Andean Market group. Agricultural production has averaged approximately 28 percent of Colombia's Gross Domestic Product over the past five years. Only 23 percent of total arable land in Colombia is cultivated by mechanical means, and seven crops account for about 75 percent of the area under mechanical cultivation: rice, cotton, sorghum, sesame, soybeans, barley and sugar cane. Imports of agricultural machinery increased over 125 percent during the past three years. The U.S. share of this import market was 31 percent in 1975.

Several factors indicate that demand for more sophisticated agricultural machinery and equipment will increase significantly over the next several years. The Colombian Government has emphasized increased agricultural production as a prime economic goal; foreign demand for Colombian agricultural products has accelerated; local manufacturers of implements for agriculture machinery are eager to negotiate licensing agreements with foreign manufacturers; and Colombia may receive production assignments within the Andean Common Market to assemble several types of agricultural equipment, probably tractors, combines, and smaller implements.

In the realm of consumer goods, the Colombian market for imports continues to be limited due to government measures to protect national industries. The local market for consumer goods is very strong, however, and will continue to improve, thus offering numerous possibilities for U.S. producers to make licensing arrangements.

With the exception of a few specific and attractive projects, potential new foreign investment in Colombia has continued the "wait and see" attitude which has characterized investors during the last few years. The principal reason for this has been the interest of potential investors in observing the way in which the Colombian Government applied the several Andean Common Market guidelines (principally Decision 24) affecting foreign investment. With the recent withdrawal of Chile from ANCOM for reasons directly related to this question (*Commerce America*, Nov. 22, page 33), it remains unclear just how far the Colombian Government will go in restricting new and existing foreign investment.

The United States continues to be Colombia's most important trading partner. In 1975, the latest year for which complete Colombian statistics are available, the United States supplied 44 percent of Colombia's total imports. On the reverse side of the coin, the United States was the largest single importer of Colombian products in 1975, accounting for 27 percent of their total export market. Following recent agreements between the Colombian Government and certain U.S. companies to proceed with investments in coal, nickel, petroleum and natural gas



ANOTHER FOREIGN EXCHANGE EARNER—*Coffee is Colombia's top export crop, but sugar, shown here being bagged, is one of several other agricultural products being sent to foreign countries in growing quantities. More than two-thirds of Colombia's sugar exports have been going to the United States in recent years.*

projects, total U.S. direct investment in the country probably exceeds $500 million.

On all publicly funded projects in Colombia, government regulations require that any foreign company wishing to participate in the bidding must have a local representative. Further, since the time between publication of the tender and submission of bids is short (30 to 60 days), it is important for interested companies to make early arrangements for an agent.

The American Embassy in Bogota, and the American Consulates in Barranquilla, Cali and Medellin, have an active program in support of U.S. companies interested in exporting to the Colombian market. This year's activities include trade missions in agricultural machinery, metalworking and machine tool equipment, petrochemical equipment, and automotive repair and service equipment. There will also be a technical sales seminar on plastics production equipment, and catalog shows for the printing and graphic arts industry and pollution control equipment. In addition, the U.S. Embassy and Consulates will actively promote the attendance of Colombian business officials at 11 industrial exhibitions and trade shows in the United States.

The Embassy's Market Analysis Unit has produced several detailed studies of important market sectors of Colombia. The most recent studies completed cover textile machinery, electric energy systems, the chemical and petrochemical industries, printing and graphic arts equipment and agricultural machinery. These and other reports are available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161 (Tel. 703-321-8543).

Hesitant Danish Economy Is Restraining Industrial Imports

Following the recession of 1974/75, the Danish economy expanded in 1976 at a rate of 5 percent, about the OECD average. This expansion, led by domestic factors such as household consumption, homebuilding, and business investment, was less pronounced in the second half of the year, however. Indications are that the economy will grow very little in 1977, if at all, reports the U.S. Embassy in Copenhagen.

With stagnation in private spending, a sharp drop in homebuilding, and little further rise in investment, an overall expansion will depend upon a more favorable export performance than in 1976. That year, imports rose far more than exports and heavy trade and payments deficits resulted. Foreign exchange reserves and the Danish krone rate were protected only by extensive government borrowing abroad and by support from participants in the "snake" arrangement. Even if trade improvements materialize, the country will remain in deficit in 1977 and beyond.

Important American exports to Denmark are various farm products, chemicals, including fertilizers and plastics, wood building materials, and a variety of industrial equipment and instruments. Aircraft for SAS and Danish charter companies from time to time represent single large export items. The markets for all these categories of commodities are well-established and rather stable, though fluctuations do occur.

The market for American goods, however, seems to react less and with greater lags than the market in general. American products suffered less than others from the recession in 1974 but, conversely, gained less from the investment recovery in 1976. If this greater stability holds, there may be some further, though limited, gains in the offing for American industrial products again in 1977 when the market generally will be dull.

The greatest benefits for American exports to Denmark in 1977, however, are likely to be reaped by farm products. Poor Danish harvests in both 1975 and 1976 have greatly increased the demand for imported fodders, while the European drought caused a short supply of fruit and vegetables.

Quality American beef has gained a good foothold in a market traditionally dominated by domestic suppliers.

U.S. plywood has gained a dominant position in the homebuilding industry, with an import market share of about 65 percent. Declining building activity in 1977 may temporarily curtail export gains, but long-term prospects remain favorable.

U.S. exports of chemical products are holding up well in a somewhat unstable market, while sales of oil products and iron and steel are both small and erratic.

The investment goods market is very significant for American exports, but involves some uncertainties in 1977. The market peaked in the first quarter of 1976, when American goods did not quite keep pace, and has since weakened, though American sales now show stability. The market will, at best, expand very little in 1977, and some concerted efforts may be required to preserve the present export levels.

Significant U.S. export possibilities exist in all kinds of investment goods and parts, wheat, grains, fruits and vegetables, feedstuffs, soybeans, and plywood.

GROWING EXTERNAL DEBT MAY BE LIMITING FACTOR IN ALGERIAN EXPANSION

Growing exports of hydrocarbons are producing substantial economic growth in Algeria, but at the same time an increase in external debt is making foreign lenders more hesitant about extending new credit and could become a limiting factor in future development.

The 1973/74 increases in oil prices and the producing countries' ability to maintain and even increase the real price of oil beyond the 1974 level have made hydrocarbons the backbone of the Algerian economy, according to the U.S. Embassy in Algiers. The share of oil and natural gas in Algeria's total Gross Domestic Product, 15 percent in 1970, has more than doubled and is expected to increase further as exports of liquefied natural gas (LNG) begin to grow rapidly in the years ahead. Production of crude oil (and condensates) has been close to 50 million metric tons a year for several years. The official figure for 1976 is 50.1 million, or about 1.07 million barrels a day.

This low-sulfur, light crude located close to major markets commands a premium price. The state sales price for Algerian crude is not announced until long after the fact, but Algeria is believed to be maintaining a differential of about $1.60 above the price of $12.70 agreed by the majority of OPEC countries at their Doha meeting in December. Improved secondary recovery methods may boost production by as much as 10 percent in 1977 and oil exports (some 90 percent of production) can be expected to produce foreign exchange earnings of over $5 billion.

LNG exports, some of which go to the United States, are still of minor importance compared to crude oil. Natural gas production was about 10.5 billion cubic meters in 1976 and LNG exports that year were perhaps half that amount. As new liquefaction facilities come on stream in 1977 and the years beyond these figures should grow rapidly. SONATRACH, the state hydrocarbons firm, projects LNG exports at about 30 billion cubic meters in 1980, with additional capacity coming on stream in the following years. At 1976 prices of about $1.30 per million BTUs (just over $0.05 per cubic meter), this represents some $1.5 billion in potential export earnings by 1980.

Because of the modest existing liquefaction capacity and the low prices in existing sales contracts, however, LNG is thought to have earned only about $80 million in 1976. LNG exports should be a major factor in Algeria's balance of payments in the years ahead but much will depend upon SONATRACH's ability to

put liquefaction and transport facilities on line without excessive delay and to win approval of its newer sales contracts by the governments of the consuming countries, particularly the United States. American firms have contracted for about half of Algeria's expected eventual LNG output of some 75 billion cubic meters a year.

The manufacturing sector is second only to hydrocarbons in the government's development priorities. The Second Development Plan (1974-77) calls for heavy investments in the steel, nonferrous metals, mechanical and electrical engineering, and construction material industries. Light industry is also being expanded and some 100 new plants of all sizes are being opened every year. Many of these are suffering from a lack of skilled manpower, but the government is investing large sums in education and training in order to overcome this problem. The Third Plan (1978-81), now being prepared, is expected to continue the government's deep commitment to industrialization.

Agricultural production was good in 1976, largely because of favorable weather. Grain production was about 2.6 million metric tons, almost double the 1975 level and well above average production in recent years. Agriculture has nevertheless been a neglected sector and production over the years has stagnated in the face of a rapidly rising population. Imports of foodstuffs, particularly of grains, almost a million tons of which must be imported in an average year, are an increasingly serious drain on foreign exchange resources (over $1 billion in 1975), and domestic production satisfies less than two-thirds of the country's needs. Wine, once Algeria's main export, now goes mainly to Eastern Europe and is not believed to offer important opportunities for increased sales abroad.

The construction industry accounts for about 12 percent of GDP and should take a larger share as economic development intensifies. The service industries (including governments) should continue to grow in real terms but may gradually be reduced in relative importance from their present level of about 18 percent of GDP.

Gross fixed capital formation is extremely high in Algeria, particularly since the 1973/74 oil price rises. Capital formation is put at over 40 percent of gross domestic expenditure and over 50 percent of GDP. This high investment rate has been accomplished at the expense of the consumption rate, but the quantum jump in the size of the whole pie following the 1973/74 oil price rises has allowed this process to take place relatively painlessly and without the need to reduce real incomes.

The current account of the Algerian balance of payments is normally characterized by a deficit in visible trade ($1 billion in 1975, considerably less in 1976), a large net deficit for services ($1.2 billion and $1.5 billion), and important unilateral transfers from abroad (about $400 million a year), largely reflecting remittances from Algerian workers in France. These elements together normally produce large current account deficits ($1.5 billion in 1975 and 1976), although the oil price windfall resulted in a surplus in 1974.

The deficit on current account has normally been financed by capital imports, entirely in the form of loans and credits since foreign direct investment is not welcome. This has built up foreign debt in recent years to an unknown but certainly substantial level. Believed to have been $4.5 billion at the end of 1975, the debt may have been substantially more then and is certainly more now. The government claims that debt service payments (interest and principal) will remain below 20 percent even when heavy repayments scheduled for 1978 and 1979 begin. Certainly little financing of the current deficit can come from reserves, which while adequate at perhaps $1.4 billion in late 1976 do not allow room for substantial rundowns. Nor can much aid financing be expected by an important oil exporter in today's world.

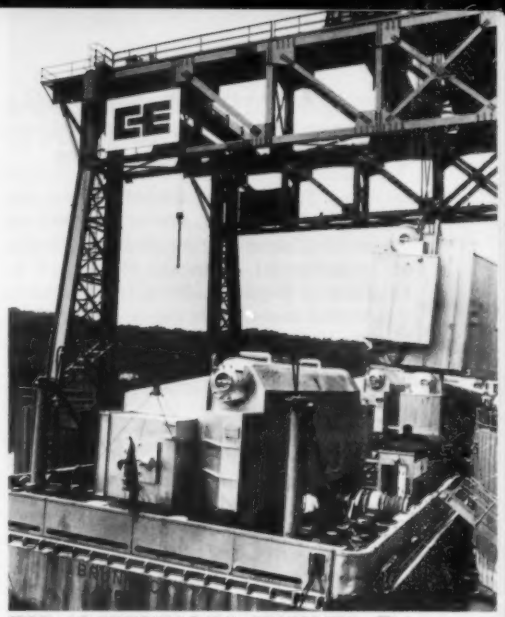
U.S. takes trade lead

Preliminary figures suggest that the United States supplanted France as Algeria's main trading partner in 1976. On an f.o.b. basis U.S. exports averaged about $40 million a month, while imports (c.i.f.) averaged about $163 million. This total ($203 million) would put the United States clearly above France, whose monthly exports averaged about $121 million and imports about $58 million.

The United States took about 40 percent of Algerian crude oil production in the first half of 1976 and increased its lead as an outlet for Algerian exports (largely crude oil but also including some LNG and LPG) in the year as a whole. Germany was in second place, followed by France, Italy, Spain and the United Kingdom.

France remained clearly in the lead as a supplier to the Algerian market, followed by Germany, the United States, Italy, Japan and the United Kingdom. Main U.S. exports to Algeria are grains, mechanical handling machinery, iron and steel products, construction and mining machinery, motor vehicles, electric power machinery and aircraft, but other categories of goods are also important.

U.S. firms have also won large contracts for the construction of gas liquefaction plants, gas treatment plants, electronics plants, and irrigation projects, and for oil and gas exploration, as well as smaller but still significant consulting contracts, particularly in oil, gas and petrochemicals. These contracts make important contributions to U.S. invisible earnings and partly account for the large net deficit in the services account in Algeria's balance of payments. U.S. trade with Algeria, both visible and invisible, is thus an important element in U.S. foreign commerce and a vital part of Algeria's foreign trade and economic life.



FOR ALGERIAN LNG COMPLEX—*The first five of an order for 22 boilers assembled at Combustion Engineering's Chattanooga plant are loaded for shipment to the liquefied natural gas project at Arzew. The boilers are designed to generate more than 6,000,000 pounds of steam per hour for use in* SONATRACH'S *natural gas liquefaction process facility.*

In addition to the substantial and growing U.S./Algerian trade in goods and services, U.S. banks, including the Export-Import Bank, have hundreds of millions of dollars in loans and credits for Algeria on their books. The United States also looks to Algeria as an important source of crude oil and as a future major source of gas to meet growing needs that cannot be fully satisfied from domestic sources.

Foreign direct investment is not welcome in Algeria, but trade and finance offer ample opportunities for U.S. business. The Algerian market for imported goods is expanding and should grow faster as new LNG exports begin to earn foreign exchange. The Algerian Government will undoubtedly continue its emphasis on development, and U.S. suppliers of capital goods, as well as of foodstuffs, should continue to find opportunities in this market. Much will depend on Algeria's ability to put new gas liquefaction facilities into production, however, and on the country's efforts to keep the external debt burden within reasonable bounds.

Liberia's Close Ties With U.S., Positive View Of Investment, Outweigh Difficulties, Risks

Liberia offers certain advantages to the American looking for potential overseas investment, according to Blaine D. Porter, Commercial Attache at the U.S. Embassy in Monrovia. With this in mind, a potential investor should be aware that Liberia has many of the problems common to developing economies, such as: inadequately trained manpower; deficiencies in the communication, transportation and general infrastructure systems; government regulations and investment procedures which may be different from those in the United States; and a growing concern that investment proposals should fit with the host country's own plans for its development.

The words "special" and "unique" often have been used to describe relations between the United States and Liberia. Politically and culturally, a special relationship has existed since Liberia's founding by freed black slaves from the United States who settled on the West African coast with the encouragement and economic support of the U.S. people and government. These first settlers arrived in 1822, and in 1847 established a Republic based on the political system of the United States. It retains much of this flavor to the present time.

Immigration from America has continued over the years and the vast majority of Liberians who go abroad for advanced training and study go to the United States. The United States has its largest diplomatic mission in Africa in Monrovia, maintaining important facilities there, and has participated in development of the country through an extensive assistance program which is continuing and expanding today.

To the business official who may consider investing in Liberia, the special economic ties should be readily apparent. America is Liberia's most important trading partner—both as a supplier of goods and services and as a customer for Liberian products. While an investor looking at Africa can find a number of countries where English is used, Liberia is the only country that uses the United States dollar as the medium of exchange. Thus, for the American investor, the problems of currency conversion are eliminated and the repatriation of profits is simplified.

The Open Door reaffirmed

American investment in Liberia goes back half a century, to 1926, when Firestone Tire & Rubber established one of the world's largest rubber plantations near Monrovia. However, most American and other foreign investment in the country followed enunciation of the Open Door Policy by President William V. S. Tubman in 1944: "We shall encourage the investment of foreign capital in the development of the resources of the country, preferably on a partnership basis, and we shall accord to investors the necessary protection and fairness of treatment."

Since that time, B. F. Goodrich, Uniroyal and private American interests have followed Firestone's lead in investing in rubber plantations; Republic Steel and Bethlehem Steel (along with major European investors) have invested in iron ore mining projects; Sun Oil has an interest in an oil refinery; Getty Oil has a palm oil plantation; and Skelly Oil has recently put a $40 million sawmill and plywood plant into operation. Estimates are that since enunciation of the Open Door Policy, well over $500 million (book value) has been invested in Liberia by American and European companies and individuals.

These investments have, of course, not been made without problems. As the wave of nationalism swept the continent and as developing countries generally began to seek a stronger voice in world economic councils, Liberia began to take a fresh look at its relationship to foreign investors. As a result, some investment concessions have been renegotiated in recent years and new concessions are being written to meet contemporary standards, primarily toward regularizing tax incentives, duty-free import permits, vehicle licensing, and other such provisions.

In some circles, these moves have raised questions regarding the future of foreign investment in Liberia. New and renegotiated concessions are viewed as having more stringent terms and the government's push toward "Liberianization" (the policy designed to move firms toward replacing expatriates with qualified Liberians in positions of responsibility) is changing the terms under which foreign firms have traditionally operated in Liberia.

It is therefore noteworthy that President William R. Tolbert, Jr. took several occasions during last year's State Visit to the United States to emphasize his government's commitment to a continuing role for foreign investment in the economy. In speaking on national development to a group of American business officials in Philadelphia on Sept. 27, President Tolbert said: "Indeed, we have affirmed that our greatest assets remain not only the vibrant spirit and the growing skills of our peoples, but also the goodwill and good conscience of our industrious and ingenious investment partners."

He outlined the advantages to investment in Liberia by noting that "the stability of our system of government, the tax and other incentives offered investors in certain areas, the free convertibility of our currency and the absence of any restrictions on foreign exchange transactions make Liberia uniquely suitable to serve as a gateway to the rapidly expanding and increasingly prosperous West African market."

The pattern of foreign investment in Liberia over the years has been primarily in the exploitation of natural resources (iron ore and timber) and in the pro-

MONROVIA, LIBERIA—*The special relationship between Liberians and Americans extends into the areas of trade and investment. This view looks toward the Atlantic.*

duction and export of basic agricultural products (rubber, palm oil and to a lesser extent, coffee and cocoa). The major new investment in the offing is the Wologisi iron ore mine, which is in the final stages of discussion between an American-Japanese consortium of investors and the Liberian Government. If developed, the project is expected to require an investment in excess of $1 billion. A major expansion of the Swedish-American iron ore mine is also contemplated, and there are other major iron deposits that have been identified. Liberia still has vast timber resources which are largely unexploited. There are several pending investment projects involving forest products, and there is room for additional foreign investment in this field. There are also indications of significant gold deposits in the country and there has been a recent flurry of activity in this area, involving potential foreign investors.

However, there is no question that future foreign investments in Liberia will more and more be geared toward processing Liberia's natural resources and developing manufacturing enterprises generally. The Skelly Oil sawmill and plywood plant is the most recent major example of this trend. The company holds large timber reserves and has an integrated operation from basic logging through the production for export of sawn lumber and plywood, thus taking advantage of the export tax structure, which gives preference to processed wood products over raw logs.

Because of the small size of Liberia's domestic market (estimated population 1.5 million), manufacturing and processing operations that must depend on domestic consumption have been limited in size and type. This restriction may be changing. Liberia has entered into economic cooperation with neighboring Sierra Leone in the Mano River Union, the aim of which is economic integration. One of the first steps contemplated is a customs union, which if fully implemented, would have the effect of increasing the market for domestic manufactured products four-fold, thus affording a larger base on which to build a manufacturing or processing facility toward expansion for export.

Despite attempts at planning, Liberia has little control over the cycles in its economy. Heavily dependent on the world market for iron ore (over 70 percent of exports), and to a lesser extent for rubber and timber, Liberia was hurt by the recent worldwide economic slowdown and the rise in the price of oil. It has managed, however, to maintain a favorable trade balance and balance of payments. Still, unless and until such time as the markets for Liberia's primary exports improve sharply, the economic boom Liberia has experienced in the last decade will be adversely affected. It is to lessen its dependence on the export of a few raw materials and make its economy less vulnerable to external market forces that Liberia is now actively seeking foreign investment partners to participate in its development plans.

Keys to success

As in any developing economy, there are certain risks to investing in Liberia. The keys to success are good advice and accurate information. Many market and other feasibility studies have been made by private firms, international agencies and the Government of Liberia itself. A potential investor should investigate past studies and be prepared to make further investigations. Investment incentives from the government are negotiable, and a wise investor will make advance contact with reputable firms and individuals in Liberia. It is advisable for the potential investor to prepare a careful plan for investment and development, including a training program for local employees, for discussion with the government. It is often advisable to seek local partners, and it is essential that terms be clearly defined in the concession or investment agreement with the government.

Advisory resources are readily available in Liberia. In addition to local law firms, four major American banks operate in Liberia and there are resident partners of two leading international banking firms in Monrovia. Offices of various international development agencies are in Liberia. The American Embassy offers full commercial services, including a regional Agricultural Attache. Advice and assistance on specific investment proposals, as well as general information on the country, are available from these sources, and should be sought.

Liberia is unmatched in developing Africa for political stability. It is strong economically relative to many of its West African neighbors, and benefits from close ties economically, politically and culturally with the United States. With its positive attitude toward foreign investment, Liberia should be carefully examined by any American investor with an interest in Africa.

Travel To Ethiopia Discouraged

The cumulative effect of heightened propaganda and serious incidents against foreigners has led the U.S. Embassy in Addis Ababa to advise against travel to Ethiopia, at least for the time being. Continuing political unrest has increased the likelihood of non-Ethiopians being involved in difficult situations.

PAKISTANI DEVELOPMENTS OFFER BASIS FOR OPTIMISM

Pakistanis have reason to be optimistic about their economy, according to Gary D. DeVight, Commercial Officer at the American Consulate General in Karachi. In a report incorporating contributions of Foreign Service officials at U.S. Posts in Islamabad, Lahore and Karachi, DeVight notes that a gas and oil strike in central Pakistan combined with a bumper wheat crop and near completion of the Tarbela Dam project have raised hopes that the country will undergo a period of significant economic growth.

On Dec. 22, Prime Minister Zulfikar Ali Bhutto announced discovery of the gas/oil field at Dhodak by the state-owned Oil and Gas Development Corporation. Based upon preliminary estimates, the Prime Minister placed oil reserves at 200 million barrels with four to five trillion cubic feet of gas in this gas condensate discovery. The announced oil quality is very high, with 75 percent gasoline, 14 percent kerosene and 11 percent diesel. The gas is claimed to be sulfur-free with 85 percent combustible methane. With Pakistan's proven gas reserves of approximately 15 trillion cubic feet, the existing small oil fields in the Potwar Plateau, and hydrolectric power coming onstream this month from Tarbela Dam, the Prime Minister expressed the hope that the Dhodak discovery would make Pakistan self-sufficient in energy within the next few years, thus saving $400 to $500 million in foreign exchange normally expended on petroleum imports.

In an attempt to encourage foreign firms to explore for oil, a new law governing such exploration and exploitation was recently passed. It provides for a 12.5 percent tax, a 50 to 55 percent royalty fee, duty-free importation of exploration equipment and tax holidays for expatriate personnel. Combined with Pakistan's "interesting" geology and the recent oil strike, the new law has resulted in increased interest on the part of foreign oil firms in Pakistan.

The 1976 wheat crop was another bright spot in Pakistan's economic picture. It may have exceeded 8.3 million tons, up from 1975's record 7.6 million-ton production. With plentiful and timely rains during the late summer of 1976, promising more than adequate moisture for the dry farming crop, and abundant supplies of water from Tarbela Dam for irrigation, this year may see another record wheat crop.

The public sector plays an increasingly dominant role in Pakistan's economy, particularly in large industry. Public sector industrial investment now commands the largest share of Pakistan's development budget. With sales to this sector often taking several years to germinate,

TARBELA FINALLY PAYS DIVIDENDS—*The first power from Pakistan's Tarbela Dam, pictured during early construction stage, is to come onstream this month.*

American firms would do well to visit regularly or to acquire agents to develop contacts in the nine government industrial corporations, and government corporations in the utilities, mining and communications areas.

The best immediate prospects for the sale of American goods and services are in oil and gas exploration and development equipment, fertilizer plants and equipment, power generation and distribution equipment, cement manufacturing equipment, and oil refinery and petrochemical plants and equipment. Additional areas of interest include port and railroad equipment, chemical plants and equipment, food processing equipment and heavy machinery. With this heavy emphasis on major industrial units, the market for American engineering and consultancy services is good.

The Pakistani textile industry, which after the 1972 nationalizations was the only major industry left to the private sector, has suffered from three poor years. The world recession which began in late 1973 cut deeply into Pakistan's traditional foreign markets, while inadequate re-investment has apparently also damaged Pakistan's international competitiveness. Last year's cotton crop was well below average and floods this year may have reduced the crop to 2.4 million bales or less, barely enough for domestic requirements. When these factors are combined with the organizational problems of the newly nationalized cotton ginning mills, the outlook for the textile industry is not encouraging.

Nationalization of the rice husking, cotton ginning and wheat milling units in July has further diminished the interest of the private sector in making new investments. New investment that is taking place tends to be concentrated in residential construction, mini-industrial plants, tourist related industries, and truck and bus transport. The best prospect for U.S. sales to the Pakistani private sector is in hotel/motel equipment.

Pakistan's imports have been running nearly double its exports, and expectations are for a trade deficit of about $1 billion for the next two or three years, with the gap perhaps narrowing as and if additional petroleum production comes onstream. Pakistan expects to make up this gap through loans from international organizations such as the World Bank and the Asian Development Bank, aid from OPEC countries and the Aid to Pakistan Consortium including the United States, and from remittances from Pakistani workers overseas. The success of this strategy can be judged by the fact that, while Pakistan ran a trade deficit of about $890 million in FY/76, it had a surplus of $50 million in its balance of payments.

Pakistan's official policy is to welcome foreign investment. A January 1976 law codifying previous administrative regulations provides for fairly liberal treatment for foreign investment, including strong guarantees protecting foreign investors from financial loss from nationalization. The Pakistani Government has generally not nationalized foreign firms, even in industries where Pakistani interests have been nationalized. However, several waves of nationalizations over the last four years, plus tight government price controls on products made by most foreign investors, have discouraged foreign investment, and there has been little outside of oil exploration. Recently, there has been some small investment interest, including a Honda motorcycle assembly plant and expansion by foreign pharmaceutical companies based in Pakistan. An important impediment to foreign investment is the extremely slow governmental decision-making process on applications by foreign investors.

With the majority of major purchasing decisions in the hands of the government, the key to success is representation by an aggressive, technically competent local agent. Most government procurement is done by international tender. Many of these tenders have a short lead time and thus require the presence of a local agent, preferably one who knows the workings of the Pakistani bureaucracy.

BANGLADESH CAN POINT TO SOLID IMPROVEMENT

Bangladesh faced enormous economic problems of relief and rehabilitation upon achieving independence in 1971. Despite generous aid flows, a combination of natural disasters, inadequate management, and abrupt nationalization of industry brought sharp reductions in per capita income, rapid inflation, a foreign exchange crisis and famine in 1974. In a remarkable turnaround since then, Bangladesh has enjoyed excellent harvests, stabilized prices, encouraged the private sector, and seen its GDP jump 11 percent in 1975/1976 over 1974/75. But the massive long-term economic problems of this desperately poor overpopulated developing nation remain.

Agriculture, basic to stability, has benefited from two consecutive years of good weather, continues the U.S. Embassy in Dacca. Food production has reached pre-war levels and imports are down, but the goal of food self-sufficiency has yet to be reached, and imports will be needed to meet ration commitments for some time to come. There is enough raw jute to meet export demand and domestic mills' requirements. Industry, which accounts for only 10 percent of GDP, is dominated by jute, textiles and sugar. The government has begun to return to private ownership the units taken over in 1972, reserving only those in the three dominant sectors for state ownership, and is actively promoting private, including foreign, investment.

Foreign aid remains important

Bangladesh imports annually three times by value its export earnings, and the balance has been paid for by $4 billion in foreign assistance commitments since independence (one-quarter from the United States) and short-term borrowing from the IMF. This dependence on foreign aid is expected to continue indefinitely. Foreign exchange reserves, albeit small, are now well-managed and Bangladesh has met every post-independence foreign financial obligation when due.

U.S. exports to Bangladesh averaged about $400 million in 1974/75 and 1975/76. Much of this was foodgrains under PL-480; other important commodities included edible oil, raw cotton and tallow. Generally, such bulk commodities, imported against international tender and financed by international lending institutions such as IDA, provide the best prospects for U.S. sales to Bangladesh. Recently, however, Bangladesh has bought significant amounts of U.S. communications equipment and, in past years, substantial quantities of fertilizers. Railroad equipment is also being imported. The major export to the United States is

jute goods, including carpet-backing cloth, burlap and cotton bagging.

Engineering and construction firms enjoy opportunities to bid on numerous foreign donor-financed projects, but many of these are against tied aid and not open to all bidders. IDA and ADB-financed projects, which can amount in any year to over $100 million, are open to tenders from U.S. firms.

Total private direct foreign investment is estimated at roughly $200 million. Most of this is British investment dating from before 1947; U.S. investment does not exceed $10 million.

Since November 1975, when the present government came to power, there has been a serious effort to promote private investment, including attracting foreign private investment. Incentives include tax holidays, deferred payment, and certain rebates of import duties. Foreign investors are offered remittance privileges for post-tax dividends and 50 percent of net salary of foreign nationals, protection against double taxation (an agreement is under negotiation between the United States and Bangladesh), and repatriation of foreign capital and accrued earnings.

Bangladesh became a member of the International Finance Corporation in 1976 and IFC officials are appraising three proposed projects this year.

Generally, in the private sector foreign equity participation is to be limited to those industries where technical know-how is not locally available and capital outlay is high, and to industries based on local raw materials or which are wholly export-oriented.

Technical collaboration without equity participation may be allowed in all types of industries.

In cases of new investment, the foreign collaborators should generally provide the entire foreign exchange component of the project as equity capital. The terms and conditions determining equity participation and the precise nature of any association, including management contracts, are, however, subject to negotiations. Joint ventures are the normal practice. All foreign investment projects require approval of the Investment Board for which the Department of Industries acts as the Secretariat.

The U.S. Overseas Private Investment Corporation (OPIC) concluded the necessary umbrella agreement with Bangladesh in 1975, which permits OPIC to insure U.S. investors against such noncommercial risks as war and expropriation. However, OPIC does not yet judge the investment climate in Bangladesh sufficiently hospitable to merit issuing such insurance at present. Central to this judgment is the fact that to date the Bangladesh Government has not compensated any U.S. investors for properties nationalized in 1972. The Bangladesh Government is publicly committed to compensation, however, and the process of settling the few outstanding U.S. claims is well advanced.

Few U.S. firms have actually invested funds since independence, but several are seriously considering doing so, particularly in the pharmaceutical industry. Four U.S. oil companies are engaged in offshore oil exploration and one U.S. company has signed a letter of intent to appraise a natural gas field in Bangladesh as a step toward contracting to export liquefied natural gas.

Burma's Program To Develop Its Non-Agricultural Economy Is Benefiting U.S. Suppliers

Burma's economy grew at a somewhat faster pace last year than it has in the recent past. While nearly all productive sectors with the exception of timber expanded, it was the all-important agricultural sector which provided the main impetus to growth. Excellent climatic conditions led to a bumper harvest of rice and most other major crops. These favorable growing conditions continued through the present crop year, and Burma anticipates its second straight year of record harvests. As a result, GDP growth for the present year should exceed that recorded last year, according to the U.S. Embassy in Rangoon.

Despite a reduction in the country's trade gap, the overall balance of payments moved into deficit for the first time in three years as capital inflows failed to offset the chronic current account deficit. Burma must accept deficits in its balance of payments position for some time if it is to approach its development goals. Monetary expansion slowed, and this plus a greater supply of foodstuffs helped dampen the rate of price increases during the latter half of 1976. However, double-digit inflation is expected to continue this year.

Although the economy remains fragile and largely dependent on the weather and the fluctuating international rice market, there are signs that the government may adopt more pragmatic policies to rectify some of Burma's economic shortcomings. A number of reforms were introduced last year, and the government also unveiled a Five-Year Development Program. The World Bank sponsored the formation of a Consultative Group of Donor Nations to help finance this program.

Although Burma continues to prohibit nearly all forms of private foreign investment, there is presently much speculation that the country's investment needs will require some relaxation of this policy, and a change could be forthcoming in the near future. Burma's minerals, forestry and fishery sectors seem prime candidates for some form of joint ventures with foreign firms. However, given Burma's uncertain economic position, the government's past antagonistic attitude toward private foreign capital, and the lack of guidelines, guarantees and incentives for foreign investors, Burma is not likely to present an attractive investment prospect for U.S. firms within the coming year.

As the government begins to implement its development program, prospects for increased sales of U.S. goods and services to Burma seem quite good. During the coming year a large portion of Burma's foreign purchases will be financed by loans from the Asian Development Bank and the World Bank. Last year over 40 percent of the value of orders resulting from World Bank loans went to U.S. suppliers, indicating that the Bank's financial projects in Burma call for the type of goods and services in which U.S. suppliers are most competitive. The ADB recently approved a loan of $46 million for a multipurpose dam project, and the first tenders for equipment purchases under this loan have already been issued.

In the near future the ADB expects to approve a $25 million loan for a forestry project which will require a wide range of forest extraction, timber processing, transport and related equipment. The World Bank is funding irrigation, forestry, transport and communications projects in Burma. Both institutions expect to undertake additional infrastructure, fishery and agriculture related projects this year. These projects should open a wide range of direct sales opportunities through international competitive tenders. There may also be opportunities for consultant services.

The government's program for expanded imports, particularly of capital goods and spare parts, should also mean a larger Burmese market for U.S. goods. If financing can be found, oil drilling rigs and all types of oil exploration and drilling equipment will be purchased in the coming 12 months. Burma's mineral industry will require extraction, transport and earthmoving equipment. Burma also requires agricultural machinery of nearly all types and capital equipment for agriculture-based industries.

In short, the major opportunities for direct U.S. sales to Burma will be in the fields of trucks and transport equipment, capital and agricultural machinery, mineral and petroleum extraction equipment, road construction and earthmoving machinery and forest extraction equipment. The country will also continue to depend on U.S. firms to supply a large share of its needs for pharmaceuticals and chemicals.

Calendar For World Traders

March 31—Newark—Sell in Venezuela seminar. Tom Brewer of Commerce's Office of International Marketing will speak.

March 31—Atlanta—Middle East Institute meeting. Peter Hale of the Commerce Action Group for the Near East will speak.

March 31—St. Louis—Seminar on Preparing for a Business Trip Abroad, Equitable Bldg. Information: Commerce District Office, Paul Bergman, 314-425-3303.

March 31-April 1—Chicago—40th World Trade Conference, Hyatt Regency. Theme: Priorities and Strategies for Future World Trade and Investment. Sponsors: Assn. of Commerce and Industry, International Trade Club. Information: 312-786-0111.

March 31-April 1—San Francisco—Practising Law Institute seminar, International Banking: Current Problems and Challenges, Stanford Court Hotel. Same program will be presented at Waldorf Astoria in New York, April 28-29. Information: Nancy Hinman, 212-765-5700.

April 1—San Francisco—Middle East Institute meeting. Jackson Hearn of Commerce Action Group for the Near East will speak.

April 4-6—New York—World Trade Institute seminar on Legal and Financial Aspects of Exporting and Importing. Rauer H. Meyer, Director of the Office of Export Administration in Commerce's Bureau of East-West Trade, will discuss U.S. Export Control Regulations.

April 5—New York—FCIB Roundtable Conference on International Finance, Credit, Collection and Exchange Problems, Summit Hotel.

April 6-7—New York—American Management Associations seminar: Financing Export Sales.

April 7—Memphis—Seminar on Hungary, Monte's Restaurant. Sponsors: Mid-South Exporters Roundtable, Commerce District Office.

April 7—New York—American Management Associations seminar: Saudi Arabia Update. Chairman: Lewis W. Bowden, Deputy Asst. Secr. for Saudi Arabia, Treasury Dept. Speakers include Peter B. Hale, Director, Commerce Action Group for the Near East, and Bonnie Pounds, Director, Office of Saudi Arabian Affairs, Treasury Dept.

April 13—New York—FCIB Book Exporters Credit Group luncheon meeting, Summit Hotel.

April 13-May 18—Atlanta—Georgia International Trade Conference: Series of six consecutive Wednesday seminars at Georgia State University designed to provide in-depth experience with details of handling export and import orders. Sponsor: Georgia International Trade Assn. Information: Betsey B. Carter, 404-524-8481.

April 14—St. Louis—Seminar on Export Packaging. Information: Commerce District Office, Paul Bergman, 314-425-3303.

April 14—Seattle — U.S. Export-Import Bank seminar on Export Financing and Insuring, Sea-First Auditorium. Sponsors: Seattle-First National Bank, Commerce District Office, Chamber of Commerce, Washington State Dept. of Commerce and Economic Development. Speakers: Stephan M. Minikes and John Bierman, Eximbank; Jerome F. Luftman, FCIA.

INTERNATIONAL BUSINESS REPORTS

National Trade and Professional Associations of the United States and Canada, and Labor Unions. 1977, 12th edition. Edited by Craig Colgate Jr. 384pp. $25.
Lists almost 6,000 organizations, including for each entry the address, date established, principal executive, number of members, size of staff, telephone number, annual budget, publications, annual meetings and historical data. To assist in locating specific information a key word index is provided, as well as a geographic index, index of chief executives, and budget index. Introduction relates history, importance and scope of U.S. trade associations and professional societies.

Write: Columbia Books, Inc., 734 15th St., NW., Washington, D.C. 20005.

Nordisk Handelskalender (The Key to Scandinavia). 1976-77 edition, in two volumes. $36.
The 73rd edition of this trade directory of Scandinavian firms includes Denmark (including the Faroe Islands), Norway, Sweden, Finland and Iceland. Contains about 135,000 up-to-date and complete addresses covering 2.000 lines of business and products. All headings printed in English and German in addition to the local language.

Write: Nordisk Handelskalender, 15 Egagaardsvej, DK-2610 Rodovre, Denmark.

Export Marketing Management. By C. G. Alexandrides and George P. Moschis. Published by Praeger. 179pp. $14.50.
Describes how to collect and analyze export information needed to reach export marketing objectives, including an introduction to the use of data processing models. Advertising, distribution and pricing are discussed in a marketing strategy section, and promotional services, including those offered by the U.S. Department of Commerce, are covered. There is a section on export financing and credit, in addition to information on practical details of export licenses and other documents. Gives general market data on major U.S. trading partners.

Write: Praeger Publishers, 200 Park Ave., New York, N.Y. 10017.

Nevada Export Directory 76-77. Prepared for the Nevada Department of Economic Development by the U.S. Department of Commerce District Office in Reno in cooperation with the University of Nevada. 87pp. Free.
Includes alphabetical listings of Nevada firms, products and services that are involved in international trade and tourism. Appendixes show sample forms and list firms in Nevada offering services to exporters.

Write: U.S. Department of Commerce District Office, 300 Booth St., Reno, Nevada 89502.

Brazilian Corporation Law. English translation. $125.
Brazil's new Corporation Law No. 6404, enacted Dec. 15, 1976, supersedes the old law of 1940 and confers new powers upon minority stockholders. This English translation includes all 300 articles. Company reports that other current laws of foreign countries can be made available in full translation quickly.

Write: All-Language Services, Inc., 545 Fifth Ave., New York, N.Y. 10017.

Generic Directory of World Convention Data. To be published in September. Pre-publication price $10.
Will contain 8,000-10,000 events projected and scheduled through the year 2000, each cataloged by type of event activity such as agriculture, medicine, insurance, education, metals, printing, etc. To include both names of planners, events, addresses, etc., and projected dates, location, size of events, and facilities. More than 130 fields of activity will be covered.

Write: World Convention Dates, 79 Washington St., Hempstead, N.Y. 11550.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, visits by foreign buyers and officials, and major construction and expansion projects.

Licensing, Investment Abroad

NIGERIA—U.S. collaboration sought to **develop 60-acre tract in Oyo State.** Land is suitable for housing development, light industry or cattle raising. Owner of property is physician, entrepreneur. Dr. A. O. Soyannwo, N6/315 Mokolo Oyo Rd., P.M.B. 5403, Ibadan; telex, 31152 WEMAK NG. P-77235.

SWITZERLAND—Firm seeks to diversify its present activity by acquiring licensing rights for manufacture of **stamps, kits** for production of stamps; **self-adhesive labels** for office and home use and for advertisement, labels for bottles; **dispensers for self-adhesive labels; devices for printing prices on packed items,** e.g., for pricing of packed food items in stores, printing of price-tags and application of the tags to goods to be sold; **equipment and process for printing bank checks, automatic signing of checks, etc.; novel types of packaging and packaging materials for food and non-food items.** Company is producer of large color-posters, forms, commercial and industrial brochures, sales literature; imports, sells special office supplies, related devices. Plant, equipped with modern machinery, has space for further expansion. Karl Schwegler, Karl Schwegler AG, P. O. Box 8050, Zurich. P-77214.

0133, 2062—URUGUAY—State-owned enterprise wants to sell its **sugar cane plantation and mill.** Property consists of about 4,973 hectares, of which 1,548 are planted in sugar cane. Mill, built in 1952, has production capacity of 1,200 t.p.h., machine shops, irrigation network, pumping stations, electric generator, buildings, roads. Property has been divided into four plots. Bids must be received by May 2. Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230 has copy of bid document for review by interested firms. Additional details available from Administracion Nacional de Combustibles Alcohol y Portland (ANCAP), Montevideo. P-77236. OPIC.

1031, 1061—GUATEMALA—Seeks joint venture partner with technology to collaborate in development of **manganese, lead and zinc deposit** in Chiantla Municipal District, Dept. of Huehuetenango, 280 km. north of Guatemala City. Mining concession occupies 36.80 sq. km.; reportedly has manganese concentration averaging 60% and zinc concentration ranging from 35 to 40%. Lead is economically exploitable and there are 20 oz. of silver per ton of ore extracted. Wolfgang Wagner, Lemarco International Co., 1344 Int'l Trade Mart, New Orleans, La. 70130. Telephone: 504-586-1131; cable, ASMACO. P-77215.

1500, 1600—SAUDI ARABIA—Firm seeks association with U.S. construction firm specializing in **road, highway and building construction, including prefabricated housing projects.** Company is willing to form joint venture or be local agent. Presently, is a general trader dealing in ready made clothing, toys, cement, iron, building materials. Annual sales, about $1 million. Rashid Gill, Production Mgr., Moukhtar Banaja Establishment (MBE), P. O. Box 7, Jidda. P-77237. OPIC.

1500, 1600, 8911—UNITED ARAB EMIRATES—Large international company interested in locating potential joint venture partners to participate in **construction projects.** Firm is involved in shipping, engineering, construction, other businesses. Stanley Robinson, Scanarab Construction Equipment Co. P. O. Box 2251, Abu Dhabi, UAE; telex, AH 2569 (EASTCOM AH). P-77238.

2200—SURINAM—Government seeks investor to do feasibility study for establishment of **textile industry.** Plans call for importation of cotton and synthetic materials for producing such basic items as under garments, socks and t-shirts. Country currently imports over $5 million worth of textiles and related goods annually. S. Ramsaran, Economic Information Service, Ministry of Economic Affairs, Anton Dragtenweg 19, Paramaribo. P-77239.

3079, 3400—AUSTRIA—Large manufacturer of disposable gas lighters seeks licensing arrangement to **produce metal and plastic parts.** Firm has excess production capacity, possesses modern automatic turning, plastic molding, stamping equipment. Employs 500. Director, Schneider, Eisert A.G., Bahnhofstrasse 31, A-3860, Heidenreichstein. P-77245.

3079—FINLAND—Seeks technology to manufacture **cross-linking polyethylene tube,** mainly for hot water transfer. Tubes should have heat endurance of at least 130 C. Firm is Finland's leading plumbing, heating, air conditioning, sprinkler installation contractor; also imports and distributes equipment. Esa Rantanen, Muotekno Div., Oy Huber AB, PL3, SF-55101 Imatra. P-77217.

3079—MONACO—Seeks licensing rights for manufacture of **melamine tableware** in Monaco. Established 1970, firm employs 23, has annual sales of 2 million French francs. Manufactures, imports, exports variety of plastic products; marketing territory includes France, Netherlands, Africa. Luigi Frateschi, Administrator Delegate, Societe Generale de Produits et Matieres Synthetiques, Le Vallespir, Blvd. du Larvotto, Monte-Carlo. P-77216.

3079—UNITED KINGDOM—Seeks licenses to manufacture **small plastic molded toys** requiring high quality precision work. Could also be interested in making other complete **products requiring precision and quality moldings.** Graham H. Law, Dir., Heatherbourne Plastics Ltd., Lock Lane off Miller Rd., Warwick, England. P-77218.

3400—AUSTRIA—Large manufacturer of cash registers offers its excess **precision metal working capacity** and corresponding skilled manpower to interested U.S. firms. Austrian firm's metalworking department includes modern stamping, milling, turning, riveting equipment. Employs 420. Also offers for sale its plant near Graz. Ideally, Austrian company would produce parts and components for U.S. firm; would also consider equity participation. Dkfm. Johann Schitter, Mgr., Anker Datentechnik GmbH KG, Ankerstrasse 4, A-8054, Graz. P-77246.

3432—MALTA—Firm, **producing high quality nickel chrome plated water fittings,** seeks joint venture arrangement or possible takeover bid. Company has modern premises and equipment, fully trained employees. Existing plant could easily be utilized or adapted for manufacture of other products. It consists of foundry, machine shop, finishing and polishing room, tool room, maintenance and nickel and chrome plating rooms; is manually operated in "Loop Type Layout" with maximum output per working day of 280 jigs or 280 sq. ft. Marsa Water Fittings Co., Ltd., telex, MW 275; cable, DEVCORP MALTA; or Joseph V. Spiteri, Consul, Consulate of Malta, 249 East 25th St., New York 10016, telephone, 212-725-2345. P-77219.

3443—FRANCE—Manufacturer of equipment for roads and highways seeks to manufacture under subcontract **any type of boiler work or sheet-iron work.** Firm employs 175. C. Vinet, Gen. Mgr., Outelec S.A., 22 Blvd. Gaston Birge, B.P. 804, 49000 Angers; telex, 720 367; telephone, 41-43-88-21. P-77228.

3463—SAUDI ARABIA—Firm seeks technical know-how from American company experienced in **fabricating aluminum doors, windows, road barriers, other aluminum products.** Presently engaged in production of fiberglass, pipes, storage tanks. Omar Ali Fakhani, Gen. Mgr., International Industry & Aluminum Co., Ltd., Mecca Rd., Kilo 6, P. O. Box 6105, Jidda. Telephone: 24897. P-77240. OPIC.

3469, 3714—FRANCE—Firm, specializing in metal cutting and plating, wishes to **act as subcontractor to produce automotive products, household appliances, etc.** Contact: Ms Doris Atkind, Trade Promotion Officer, European American Banking Corp. 10 Hanover Sq., New York 10015; telephone, 212-437-4300. P-77248.

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. WTDR request forms may be obtained from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

3494—FRANCE—Manufacturer of specialty valves and gates for gas is interested in manufacturing under license or subcontract **industrial valves and gates** used in petrochemical and metallurgical industries and in gas plants. Employs 50. Pierre Herdt, Gen. Mgr., Merobel S.A., 56-58 Rue Stendhal, 75020 Paris; telex, 260-717; telephone, 797-9350. P-77229.

3500, 3600—THAILAND—Manufacturer of television receiving sets, air conditioning units, water coolers and fans plans to enlarge production facilities. Seeks licenses, advanced technology to make additional products. These include **air compressors, electric motors, gas cooking ranges, water pumps, power tools, sewing machines, bush bearings for motors, diesel and gasoline engines.** Firm was established in 1959. Will sell to both domestic and export market. Maitri Mojdara, Mng. Dir., Sanyo Universal Electric Co., Ltd., 19 Soi Udomsuk (103), Sukhumvit Rd., Bangkok. WTDR. P-77220. OPIC.

3523, 3524, 3822—BRAZIL—Local manufacturer of silos and agricultural implements is seeking association with experienced U.S. firm that could provide technical know-how in **grain handling, drying and storage, particularly in sphere of electronic moisture testing equipment and remote control temperature monitoring.** Firm is willing to consider U.S. collaboration on equity basis of 10 percent or against payment of royalties. Specializes in manufacture of metal silos, augers, grain cleaners, gravity flow wagons, fans, heaters and related equipment. Sells its products through network of 42 distributors in 7 major grain producing states of Brazil. Company owns plant site of 150,000 sq. m. in Curitiba, of which 3,000 sq. m. are currently occupied by factory buildings. James Phillips, Pres., Silogrannel-Industria e Comercio de Silos e Implementos Agricolas S.A., Caixa Postal 5133, 80000 Curitiba (PR). P-77221. OPIC.

3531, 3569 — BRAZIL — Manufacturer of industrial machinery seeks joint venture to expand operations. U.S. partner is offered equity of 45%, with possibility of management participation, in return for investment of around $480,000. Brazilian firm makes **bag-filling and grinding machines, all purpose metal silos, storage tanks, mixers, agitators, bucket elevators and bulk material conveyors.** Owns 5,500 sq. m. plant site in suburb of Sao Paulo. Has access to government financing for expansion of project. Plans to enter export field. Elisio Bueno, Pres., Industria de Maquinas Carbeu Ltda., Estrada da Refinaria de Petroleo Uniao 117, 09300 Maua (SP); P-77234. OPIC.

3544—UNITED KINGDOM—Firm seeks license to manufacture and/or represent products compatible with its own precision engineering manufacture of **special purpose machines, mechanical handling equipment, jigs and fixtures.** Firm specializes in rolling mill equipment, slitting and cut-to-length lines. Also has experience in manufacture of dual form press equipment. Employs 160. L. Hudson, Mng. Dir., Kingsbury Jig & Tool Ltd., Kingsbury Rd., Birmingham B24 9PX, England. P-77241.

3546—UNITED KINGDOM—Established manfacturer and worldwide exporter of **needle scaling guns and nonmechanical materials handling equipment** seeks licenses to manufacture complementary tools. Also interested in importing and distributing tools through its existing national distribution network. Company employs 60. B. G. Ough, Dir., John Trelawny Ltd., Caswell Rd., Sydenham Farm Estate, Leamington Spa, Warwickshire CV31 1QG. P-77242.

3552 — UNITED KINGDOM — Seeks licenses to produce **textile, chemical and laundry machinery, stainless steel pressure vessels and other capital equipment of medium weight.** Firm produces dyeing, finishing machinery, dry cleaning equipment. Employs 325, including 10 salesmen; established 1827. D. J. Lloyd, Mng. Dir., Samuel Pegg & Son Ltd., Barkby Rd., Leicester LE4 7LP, England. P-77247.

3561 — AUSTRIA — Firm seeks licensing arrangement to manufacture **hydraulic pumps and motors, high pressure hydraulic and dumping devices, agricultural machinery, fittings and hinges.** Contact: Ms. Doris Atkind, Trade Promotion Officer, European American Banking Corp., 10 Hanover Sq., New York 10015; telephone, 212-437-4300. P-77249.

3589—BELGIUM—Firm seeks licensing arrangement to manufacture, distribute **electromechanical water purification equipment and appliances.** Contact: Ms. Doris Atkind, Trade Promotion Officer, European American Banking Corp., 10 Hanover Sq., New York 10015; telephone, 212-437-4300. P-77250.

3612 — ITALY — Manufacturer of **power and distribution transformers, panelboards and distribution boards** is interested in licensing arrangements. Seeks new technology to upgrade and expand current product line. Established 1947, employs 80. Annual sales exceed $2.7 million. Currently building new plant. Ing. Emilio Zigon, Mng. Dir., Trakindustria S.N.C., Via Stefano Barbato 12/14, 80L47 Barra (Napoli). P-77222.

3613 — INDIA — Seeks joint venture to manufacture **500,000 d.c. micro motors annually for tape records.** U.S. participant is offered minority equity (up to 20%) in return for technology, capital. Estimated cost of project, $300,000. Indian firm manufactures, markets fractional horsepower motors, fans, cable. Currently India does not produce d.c. micro motors for electronic applications. C. D. Mittal, Mng. Ptnr., Nirmal Manufacturing & Marketing Co. (NMM), R-78 Greater Kailsh 1, New Delhi 110048; cable, NIRGENCIES; telephone, 634051. P-77243. OPIC.

3662, 3823, 3811—GERMANY—Seeks licensing agreements for production of **industrial precision instruments, aircraft engine and fuel system instruments, aeronautical and navigational instruments, instrumentation radar systems and airborne and missile/space radars.** Firm established 1946. Manufactures, exports, imports aviation instruments and equipment in field of precision mechanics, optics, electronics. Employs 300. Hans Gunz, AOA Apparatebau Gauting GmbH, Ammerseestr. 31, D-8035 Gauting. P-77223.

3678—GERMANY—Seeks joint venture to manufacture **polyphase connectors, opto-electronic components and quartz crystals.** Would also consider representa-

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate nor make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action, including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

tion agreement covering these products. German concern is engaged in technical consulting; represents producers of electronic components. Owns branches in Berlin, Hanover, Essen. Reportedly has interest in six German companies. Sound financial standing. M. Oberlaender, Mgr., Industria M. Oberlaender, Ingenieruge-sellschaft mbH & Co., Hasenbergsteige 31, D-700 Stuttgart 1; telephone, 0711/642078; telex, 07-22542. P-77224.

3679—INDIA—Major company planning diversification seeks joint venture to manufacture electronic products. U.S. firm is offered up to 40% equity in project to produce annually **500,000 fast acting fuses for semiconductor applications and 50,000 strain gage, solid state transducers for industrial process, navigation** and other uses. Technical know-how, equipment, components, marketing assistance are sought of American partner. Indian group is one of country's largest business houses. It has numerous affiliates involved in textiles, shipping, chemicals, engineering, banking. Also has started several new ventures in collaboration with foreign firms. Bangur Bros. Ltd., Fort Gloster Industries Ltd. (Cable Div.), 31 Chowringhee Rd., Calcutta 700016; cable, GLOSCAB; telex, CA-7184; telephone, 248241. P-77225. OPIC.

3711 — FRANCE — Firm interested in manufacturing under license **special delivery and transportation trucks** used in agriculture, platform trucks, and multipurpose vehicles for municipalities. Employs 600. Francois Dert, Gamma-2MI, 9 bis Rue de Vezelay, 75008 Paris; telephone, 522-1349. P-77226.

3711 — FRANCE — Firm seeks licensing arrangement to manufacture **special vehicles, utility vehicles, street sweepers, trailers.** Company presently manufacturers utility truck bodies and special vehicles. Employs 700. Michel Nicolas, Pres., Carrosserie Carrier, Rue Ambroise Croizat, 95100 Z. I. Argenteuil; telephone, 982-0912; telex, 600 960. P-77227.

3732 — KOREA — Seeks licensing agreement for **fiberglass boat design and fiberglass processing technology.** Firm will consider technology assistance agreement on royalty basis or straight fee based on negotiation. Korea company is constructing fiberglass plant to produce 1,800 m.t. fiberglass per year. Firm also plans to construct shipyard by end of 1977, seeks to conclude its technology assistance by June 1977. Lee Jung-Ho, Mgr., Planning Dept., Project Div., Lucky Ltd., C.P.O. Box 1088, Seoul 100. P-77230. OPIC.

3829—SWITZERLAND—Company seeks license for following type of machinery, mainly for use by electric and sanitary installation companies and building industry: **portable metal detectors capable of detecting steel reinforcements, pipes and electrical cables in concrete.** System may work on principle of ultrasound detection or other means which do not present any danger to operator. Items sought would be used to complete firm's manufacturing and sales program. Firm is manufacturer of special pneumatic drilling machines such as used by professionals in building industry. Plant is well equipped. Marto AG. Bielstr. 67, 2555 Bruegg; telephone, 032/53 42 53; telex, 34 873. P-77231.

3995, 3999—PERU—Firm seeks information on American **technical know-how and equipment for crematories as well as funeral homes which it plans to install in Lima.** Information requested includes equipment price, operating cost, area required. Firm's plans indicated aims at gradual change from current burial service to use of crematories. Peruvian company is charitable organization established in 19th century to extend welfare, social assistance to low-income groups. It **began as private entity but is presently** run by Central Government. It operates a number of hospitals, old-age homes, orphanages, as well as Lima cemetery. Crematories and funeral home services are completely unknown in Peru and their installation represents good potential for equipment sales. Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77232.

5086—MEXICO—Designer and administrative specialist has completed **design of hospital** to be located in southern zone of Mexico City. Desires financial participation (credit to be paid in five years), equipment. Cost estimated at $1 million. Hospital facilities would include laboratories, electrocardiograph, x-ray, surgical operating rooms, emergency section, 100 beds, etc. Julio Hoffner Long, Colina de Lajas 69, Colonia Bulevares Satelite, Estado de Mexico. P-77233.

5311—SAUDI ARABIA—U.S. firm sought to establish American-style consumer products **shopping center.** Partner should be experienced company engaged in marketing consumer goods using chain store merchandising method. U.S. partner would receive long-term management contract. Additional information from Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77244. OPIC.

Agency Of State In Brazil Offers Service To Investors

The Institute for the Industrial Development (INDI) of Minas Gerais is a State agency in Brazil linked to the Secretariat of Industry, Commerce and Tourism and established to assist potential investors. INDI can provide information and orientatıcn to the investor with regard to industrial markets, raw materials, labor, utilities, financing, incentives, joint ventures, land and other factors of significance to an investor's project. INDI can also assist companies in their contacts with the various Federal agencies responsible for approving incentives and importation of equipment and raw materials. INDI services are available at no charge.

Some of the advantages of investing in the State Minas Gerias are available skilled labor; production of basic industrial raw material, including 40 percent of Brazil's primary steel production, 100 percent of the merchant pig iron and 65 percent of primary aluminum; establishment of a large mechanical and metal fabrication industry and infrastructure to support this industry; a well developed communication and transportation infrastructure to facilitate efficient procurement of components and marketing of products to major Brazilian market centers and export ports; a State Government highly receptive to new industry.

Additional information and INDI brochures may be obtained by writing Marco Paulo Dani, Dir., Instituto De Desenvolvinmento Industrial De Minas Gerais, Avenida Prudente de Morais, 1641, 30.000 Belo Horizonte, Minas Gerais, Brasil; telephone, 031-337-5566. Cx. Postal 992; telex, 311-539, 311-124, 311-268. P-77255.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Domestic Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-377-5361), referring to file number.

Joint Venture

ITALY—Packaged x-ray dental film, both standard and of a special type that is instant daylight self-developing. PHIL-X, S.p.A., Via Alassio 30, 10126, Torino. File 3308.

GERMANY — Packings, seals, gaskets, washers (seeks joint venture partner or may establish own plant in U.S.). Werner Krause, Feodor Burgmann Dichtungswerk, Aeussere Sauerlacher Str. 6-10, D-8190 Wolfratshausen. Germany. File 3309.

GERMANY—Machine tools, assemblies, including automatic hand screwdrivers, screwdriving machines, modular screwdriving units, noiseless orbital riveting machines, automatic and modular inserting units, small and light-duty conveyor belts, assembly tables and benches, and special automatic assembly machines. Karl-Heinz Weber, Mgr., Weber-Schraubautomaten GmbH KG, Spezialmaschinenfabrik, Aurikelstr. 11-15, Postfach 1220, D-8190 Wolfratshausen. File 3310.

Licensing

AUSTRALIA — Bricklaying tool. Brickmate, 22 Station Rd., Deagon, Qld. 4017. File 3311.

AUSTRALIA—Machine for making dim sims, a Chinese food. Sauerland Engineering, 31 Jones St., Thornbury, Vict. 3071. File 3312.

GERMANY—Technique for recycling automobile tires and remanufacture of semifinished technical rubber products. Company wants to add its line to that of existing U.S. company or establish its own plant in U.S. Write: American Consulate, APO New York 09108. File 3313.

ISRAEL — Patented vertical conveyor system for granular materials at 600 t.p.h. I. Beresinsky, Moledeth Development Co. Ltd., P.O. Box 407, Haifa. File 3314.

TURKEY—Air pollution distillation device. Behcet Baskent, Gazino Duragi, Urgum Sokak No. 30/7, Kecioren, Ankara. Flie 3315.

GERMANY—High performance homogenizers and high speed mixers for dry substance, generally for chemical industry. Gerd J. Lang, Wilhelm Lang KG, Praezision Swerkzeuge und Maschinen fabrik, Muehlweg, D-6380 Bad Homburg V.D.H. File 3316.

UNITED KINGDOM—Coremaking, shell molding machines; foundry precision patterns. Reciprocal licensing. K. E. Wilcox, Group Sales Mgr., Steloy Foundry Machines Ltd., Hayes Industrial Estate, Halesowen, Worcs. B63 2RS, England. File 3317.

UNITED KINGDOM—Flame traps used extensively in chemical, petroleum, gas, marine, mining and aircraft industries, and as safety devices in pipelines and ducts carrying combustible mixtures, and

for storage tank vents and stack pipes. Will withstand succession of explosions. Reciprocal licensing. Geoffrey Binks, Sales Mgr., Amal Ltd., Holdford Road, Witton, Birmingham B6 7ES, England. File 3318.

USSR—Following are five licensing opportunities offered by V/O Litsenzintorg, foreign trade organization owned and operated by Soviet Government; for additional details, write or call U.S. Department of Commerce.

Methods of complex processing alunite raw materials into alumina, potassium sulfate and sulfuric acid. Also methods of side production of vanadium pentoxide and gallium. Waste sludge may be used as building material. File 3319.

Non-blast furnace desulfuration of basic pig and cast iron. File 3320.

New, Soviet-developed, grade of steel for metal cord. File 3321.

Gating system to supply molten metal into mold with or without motion of jets along circle depending on operating specifications. File 3322.

Soviet-developed flying saw for cutting pipes in motion in pipe rolling mill product line. File 3323.

U.S. Representation

GERMANY—Service **electronic controls** imported into U.S. On-site replacement of parts (mostly circuit boards), and subsequent repair of damaged parts. Philips GmbH, Unternehmensbereich Elektronik Fuer Wissenschaft und Industrie, c/o Mr. Sarges, Postfach 310 320, D-3500 Kassel. File 3324.

FRANCE—Insulated glass windows. Mr. Anastasie, Gen. Mgr., Solar Control France, 18 Rue Louis Blanc, 75010 Paris. File 3325.

The following trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Program, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest indicated by codes 0111-1799 and 4011-8999 are based on the Standard Industrial Classification Manual, 1972; codes 20 through 39 come from Numerical List of Manufactured Products (New 1972 SIC Basis), MC72-1, 2. Codes beginning with 99 are from the TOP coding system.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Department's Export Administration Regulations. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Miscellaneous nonmetallic minerals, except fuels

1499—MOROCCO—Asbestos: 4T, 5D, 6D & ML6 types. Annual consumption about 1,000 m/t ea. of first 3 qualities, & 800 m/t/yr. of 4th item, described as blue asbestos. Interested in bid for deliveries in 50 kg plastic bags, c&f Port of Kenitra. Reply to Miloud Chaabi, Pres., Chaabi & Compagnie, B.P. No. 45, Kenitra.

Wood products

2499589—AUSTRALIA — Wood flour for pulp industry. Joint venture of St. Regis Paper Co., N.Y. & Australian Consolidated Industries Ltd., Melbourne. Reply to R. C. Costello, Sales Mgr., Pulp & Paper St. Regis-ACI Pty., Ltd., P.O. Box 38, Homebush, N.S.W. 2140. Telex AA24388, Cable STREGIS, Tel. 764 0033.

Drugs

• **2834000—ALGERIA** — State Pharmaceuticals Monopoly, Tender No. 2049A, large quantities and wide variety of pharmaceutical products for human and veterinary use. Closing date April 28. Correspondence in French. Copies of tender, in French, available from Room 2106, U.S. Department of Commerce, Washington, D.C. 20230; 202-377-2239.

Petroleum refining

2911020, 3312111, 1211—UNITED KINGDOM—Petroleum coke; coke; coal. Joint venture of Diamond Fertiliser & Chemical Co. Ltd., London. Has 14 employees, annual sales 5 million pounds. Reply to J. C. Stafford, Diamond-Aceto, Kempson House, 35-37 Camomile St., London EC 3A 7AD, U.K. Tel. 01-283-3833; Telex 88235; Cable DIACOCHEM LONDON EC3.

Handbags, other personal leather goods

3172000, 3199000—AUSTRIA — Leather goods. Dir. sale & agency. Large textile trading co. interested in adding U.S. goods to sales program. Documented offers with c.i.f. quotations requested. Open account terms of payment preferred. Reply to—Mr. Rapp, Handels-Actien-Gesellschaft Nfg. KG, Leystrasse 86, A-1200 Vienna. Cable HAG WIEN; tel 0222/333644; telex 4504.

Flat glass

3211429—BELGIUM—Glass sheets—heat resisting, borosilicate rolled quality. Small private firm, est. 1947, imports & mfrs. glass sheets used in heating apparatus such as stoves, boilers, etc. Imports 10,000 sq. meters glass yearly. Reply to—Claude Houben, Mgr.-Owner, Le Cuir Recoupe, Rue Schmitz, B-1080 Brussels. Tel. 425.94.16.

Pottery, related products

3261000—HONDURAS—Vitreous & semi-vitreous plumbing fixtures, accessories & fittings. Dir. sale & rep. on commission basis. Operates agency for rep. of foreign firms on commission basis. Covers entire country through several traveling salesmen. Requests offers ASAP, c.i.f. Puerto Cortes, incl. terms of payment, delivery, commission basis, and catalogs, price lists, etc. Enjoys good reputation in local banking & commercial circles. Reply to—Jose Arnulfo Raudales, Mgr., Agencia Raudales y Cia, P.O. Box 1510 1A. Calle 421, Barrio San Rafael, Tegucigalpa, D.C. Cable RAUDALOSYCO; tel 222752, 224324.

Steel mill products

• **3312000, 3317000, 3496000—AFGHANISTAN**—Ministry of Water & Power invites bids for 2,400 meters of metallic non-corrosive 12-inch diameter casing; 400 meters of metallic non-corrosive screen of 12-inch diameter with 1.5 mm slot opening and 20 percent open area; 800 meters of metallic non-corrosive 12-inch diameter screen with 2 mm slot opening and 20 percent open area; 400 meters of metallic non-corrosive 12-inch diameter screen with 2.5 mm slot opening and 20 percent open area; 6,000 meters 2-inch diameter galvanized pipe. Financed from general revenue. Interested suppliers requested to offer c.i.f. Kabul prices ASAP and specify delivery date to: Machinery Dept., Ministry of Water & Power, Block 13, Nader Shah Mina, Kabul.

Rolling, drawing nonferrous metals

3351413—THAILAND—Copper plate; est. requirement 5,000 metric tons/month. Dir. sale & rep. Reply to—Luck Limtanakul, Chairman, Denza Industries Corp., Ltd., 197/1 Silom Bldg., 4th Fl. Silom Road, Bangkok. Tel. 2344851.

Heating appar., plumbing fixtures

3433729—PORTUGAL—Industrial rotary cup heavy oil burners, for steam & hot water boilers. Established 1962, working capital about $100,000. Specialized in import, sales and installation of commercial & industrial airconditioning & refrigeration equipment, Burners, air heating units, etc. Highly regarded among banking & trade circles. Recommended

as good trade contact for interested U.S. firms. Cable—Faust O. Oliveira, mgr., Socequi-Socidedade de Equipamentos Industriais, Lda., Rua Delfim Ferreira 351, Oporto. Cable SOCEQUI; tel 65556, 690731, 690000.

3433730—JAPAN — Portable, infrared kerosene-fired space heaters to be used in factories & outdoor construction sites. Plans import 100 units as trial order this year. Claims product has strong potential market in Hokkaido, Japan's northernmost prefecture. Estab. 1935, is wholesaler of imported & domestic auto parts, accessories, garage equipment, hand tools, home use air conditioners and heating units, and golf course equip. Employs 210. Capital: $600,000. Sales territory: Hokkaido. Sales turnover last year $20 million. Well regarded firm maintaining good relations with banks. Hopes receive product literature, price quotations & terms ASAP. Reply to—Masanao Hariu, Import Section, Hokkai Jidosha Kogyo K.K., 1 Higashi 4-Chome, Ohdori, Chou-Ku, Sapporo 060. Cable: FORD HOKO SAPPORO, telex: 0932-819.

Construction, mining, materials handling machinery, equipment

• **3530000—BURMA**—Chairman, Pugy I Project Implementation and Coordinating Committee, Rangoon City Development Committee Bldg., Mahabandoola and Barr Sts., Rangoon, requests bids on following: 15 55-pound pneumatic heavy duty drilling jack hammers and 10 70-pound pneumatic pavement breakers; 12 14/10 cu. ft. gasoline powered portable concrete mixers; 25 concrete vibrators; 4 600 CFM air compressors. Will be financed with ADB credit. Embassy will forward copies of bid invitation and specifications to interested U.S. firms on request, citing "T-0034," enclosing check for $22 per set, payable to U.S. Embassy, Rangoon. Bid #6/77 RWSP-P ICC/ADB 162 BUR(SF)/163 BUR. Deadline May 25.

• **3531000, 3536000, 3537000—MADAGASCAR**—Following equipment is sought by Ministry of Transport, Supply & Tourism, Direction Du Port Autonome De Tamatave. Lot No. 1: One container crane, overhead traveling, with spreader, 35-40 tons, and one set of parts & attachments. Lot No. 2: One crane, power, rubber mounted, 35-40 tons, and one set of parts & attachments. Lot No. 3: One tractor, industrial, 90-100 HP and one set of parts & attachments, with five trailer, 25 tons and one set of parts & attachments. Only offers from firms in member countries of IBRD will be considered, and with following refundable deposit: Lot No. 1: 300,000 FMG (approx. $1,220); Lot No. 2: 400,000 FMG (approx. $1,625); Lot No. 3: 500,000 FMG (approx. $2,030). Financed by IBRD. Bidding documents in French containing bid procedures must be obtained from Monsieur Le Chef Du Service Technique, Port Autonome De Tamatave, Boite Postale No. 492, Tamatave, Madagascar; Telex: PORT TAV. 6197; Tel: 321-55; on payment of 10,000 FMG (approx. $41) by check made out to "Port Autonome De Tamatave". Language of correspondence French. Bid deadline April 30.

• **3531000, 3711000—PHILIPPINES**—National Irrigation Administration invites firms to bid for supply and delivery of various construction equipment and utility vehicles for Jalaur Irrigation Project which shall include tractors, cranes, backhoes, loaders, truck tractors, motor graders, vibratory rollers, generators, pumps, compactor plates, concrete vibrators, concrete mixers, dump trucks, forklift trucks, vibrication trucks, mobile shop trucks, pickup trucks, station wagons, jeeps, sedans and 18 passenger buses. Manufacturers or their duly authorized representatives shall be permitted to bid on individual items. Philippines Government has received loan from World Bank in various currencies towards cost of Jalaur Irrigation Project. Bids will be accepted only from or on behalf of manufacturers of wellknown registered brands of equipment and vehicles called for whose offices or manufacturing facilities are located in member nations of World Bank including Switzerland and who can provide suitable assurances that spare parts and service facilities will be available in Philippines as and when needed. Manufacturers or authorized representatives must obtain contract documents upon non-refundable payment of U.S. $50 per copy from Cesar L. Tech, Asst. Administrator, National Irrigation Administration, Off. Special Projects, 6th Fl., VIA Building A, Epifanio De Los Santos Ave., Diliman, Quezon City, Metro Manila, prior to submitting offers. Bidders will be required to submit together with proposals qualification data which will indicate capacity to provide service support and spare parts inventories in Philippines. Bid deadline May 31.

Special industrial machinery

3559589—NICARAGUA — Pharmaceutical machinery. Contact Carlos Jiron G., Apt. Postal 3964, Managua, Phone 6-03-77.

General industrial machinery

• **3560000—INDIA**—10 centrifugal pumps of 7265 liters per minute (LPM) capacity with motor units and four pumps, also centrifugal of 3650 LPM capacity with motor units along with essential spares for five years. Tender No. DPS: NAPP (PPED):CAP 24; bid deadline May 16. M. N. Gopalakrishman Nayar, Purchase Officer, Bhabha Atomic Research Centre (BARC), Directorate of Purchase & Stores, III Floor, Mohatta Bldg., Palton Road, Bombay 400 001.

• **3560000—TURKEY** — Compressors, 12 units, 700-1500 cu. m/hr capacity with 0.3-8-10 Kg/sq cm pressure; system for washing insulators at 350-154 KW switchyard through water spraying. Tender no. not specified, bid deadline April 28. Turkiye Elektrik Kurumu (Tek), Santrallar Dairesi Baskanligi, Necatibey Caddesi 3—Maro Han—Kat 5, Yenisehir, Ankara (Turkish Electricity Authority). Bidding specifications may be obtained from above address at TL 2,500 per set (U.S. $1 equals TL 17.50).

Office, computing, acct. machines

3579000—GERMANY—Horst Vogel, Mgr., Drissler & Co., Insterburger Strasse 16, 60000 Frankfurt/Amin-90, seeks parts and attachments for copying machines, special papers and toners. Tel: 0611-770006, Telex: 4-13-128. Copy of specifications available from above address.

Service industry machinery

• **3589200—BURMA**—Supply of machinery and equipment for water treatment plant including water supply, fire fighting, and humidification and ventilation systems. Bid deadline May 21. Write to: Mng. Dir., Textile Industries Corp., 53 Pyidaungsu Yeiktha Rd., Rangoon. Interested firms please enclose check for U.S. $33 per set citing T-0035. Will be financed with Asian Development Bank credit.

3589281, 3589291—GUATEMALA — Supply of drainage pipe and sewer collector and sewer cleaning equipment. Deadline not fixed. Municipality of Guatemala City seeks literature and prices for sewer cleaning equipment. Drainage pipe to be cleaned measures 10" by 24". Sewer collectors measure 1 m to 4.75 m. at depth up to 50 m. Reply to Ing. Mario Rojas, Division de Drennanjes, 5 Piso, Ala Norte, Municipalidad de Guatemala, Guatemala City.

Electric lighting, wiring equipment

3643092—SWEDEN — Overhead trolley line material. Share capital skr 500 million, almost all owned by govt. (Statsforetag AB); remaining shares owned by Granges AB (WTDR 9/76). Annual turnover approx. skr 2 billion. Has iron ore mines & ore concentration plants at Kiruna, Svappavaara & Malmberget, & unloading stations at Lulea & Narvik. Highly recommended trade contact. WTDR 4/76. Reply to Stig Engman, Luossavara-Kiirunavaara AB (LKAB), Fack, S-100 41 Stockholm. Cable LUOSSAVARA; telex 1812 LKAB S; tel 08/24 90 60.

Communications equipment

• **3661000—THAILAND** — Telephone Organization of Thailand (TOT), Ploenchit Rd., Bangkok, has issued tender number TOT B-25 for supply of 90,000 dial type subscriber telephone instruments; 11,600 push-button type subscriber instruments; 2,000 public telephone instruments. Bid deadline May 16. Copy of specifications available from above address for $100 until March 31.

Aircraft, parts

• **3721300—TURKEY**—Turkish Airlines, Inc. (THY) will lease aircraft with approx. 800 seats capacity to replace five Boeing 707 aircraft. Company will select from following configurations based on offers received. Passenger configuration to include tourist class accommodations only. Douglas DC 9 Series 30 aircraft with 111 tourist class seats; JT8D-9 type engines preferred. Boeing 727-200 aircraft with 167 tourist class seats; JT8D-15 type engines preferred. Douglas DC-10 series 10 or 30 aircraft with approx. 345 tourist class seats. Boeing 707 series 100 or 300 aircraft with fan engines. THY prefers low hour aircraft in all cases. Quotations should contain: total body and engine flying hours; body and engine flying hours before first overhaul; monthly rentals and body and engine maintenance charges. Lease will start April 1, 1978 and be valid 24 months. Interested U.S. suppliers can quote for one or more aircraft types. Bid deadline April 30. Contact Kaptan Bekir Akkan, Turkish Airlines, Inc., Technical Dept., Yesilkoy, Istanbul.

Measuring & controlling devices

3825000, 3822000, 3824000, 3829000—GERMANY—Integrating instruments, electrical, all types; test equip. for testing electrical, radio and communication circuits & motors, all types; other electrical measuring instruments, all types; auto-

matic temperature controls, all types; process control instruments, all types; integrating meters, nonelectrical, all types; revolution counters, digital; mechanical, electrical & electronic input. Revolution counters, pneumatic input; other counters, incl. centrifugal tachometers & event recorders; physical properties testing & inspection equip., all types; commercial, meteorological, & general purpose instruments, all types; nuclear radiation, detection & monitoring instruments, all types; scalers sold separately; nuclear radiation, detection monitoring instruments. Quote f.o.b. U.S. harbor. Estab. 1967, employs 500 with annual sales DM 50,000,000. Financial ref: Deutsche Bank AG, 463 Bochum. Reply to—Herr Grossmann, Mgr., Eur Control, Reusingstr. 8, 463 Bochum. Tel 0234-53761; tx 0825 604.

Optical instruments, lenses

3832100 — SWEDEN — Drug detection equip. Dir. sale & agency. Palmgren is owner/manager of this small firm, which sells electronic/chemical alcohol breath analyzers to police authorities in Scandinavia. Local credit sources recommend this firm as trade contract although it has rather limited funds. Normal business precautions should be observed. Palmgren planning to visit U.S. in May or June this year. Reply to—Lars Palmgren, Mng. Dir., Palmenco AB, Ruegensvaegen 14, S-121 63 Johanneshov. Cable PALMENCO; telex 17018 PALMENCO; tel 08/48 12 22.

Surgical, med., dental instruments

• **3841000—EGYPT**—Ministry of Health, Executive Project Director, IAD Population Project Office, 5 Hadeka St., Garden City, Cairo, has issued tender for supply of medical equipment and furniture. Bid deadline May 1. Copy of specifications available from above address for $7.

3842300—GERMANY—Industrial protective clothing, all types. Reply to Herbert Zimmermann, Owner, Baubedarf Zimmermann, Waldstrasse 83, 5450 Neuwied 22.

Photographic equipment

• **3861000 — INDONESIA** — Bakosurtanal, National Resource Survey and Mapping Project, Jalan Dr. Wahidin, 1 No. 11, Jakarta Pusat, has issued tender number IBRD-1/NRSMT/77 for supply of cartography/map reproduction equipment; printing equipment; aerial photography processing laboratory; office and laboratory furniture; photogrammetry. Bid deadline April 21. Copy of specifications available from above address for $396.39.

Toys, amusements, sporting & athletic goods

• **3940000—ZAMBIA**—Supply of 152,000 units of wide range of camping equipment including tents, beds, cooking, cutting and lighting (battery) equipment. Deadline April 22. Submit responses to Secretary, Republic of Zambia Central Supply and Tender Board, P.O. Box 1009, Lusaka. Tender instructions available at U.S. Department of Commerce, Washington, D.C., 202-377-2923.

Costume jewelry, novelties, notions

3964251—JAPAN—Hair set tapes, hair control on rolls. Urgently needed. Reply to Kozaburo Tanabe, Pres. Japan Nox Trading Co., Ltd., Azabu Hiroo Mansion, 5-1-29, Minami Azabu, Minato-Ku, Tokyo 106. Cable TANANOXTRA TOKYO; Tel. 03-446-3126.

Manufacturing industries

3999951—HONDURAS — Christmas articles, such as xmas tree ornaments & decorations, other xmas decorations, gifts. Offers c.i.f. Puerto Cortes, against L/C or other terms of payment, catalogs & price lists. Reply to Jorge J. Faraj, Mgr., Distribuciones Universales S.A. De C.V., P.O. Box 447, San Pedro Sula. Cable DIUNSA, Tel. 523816.

Scrap materials

5093—PAKISTAN — 10,000 tons remeltable carbon steel scrap, above 3mm thickness, less than 600 & 400 mm. length & width, free from contaminations of copper, tin, zinc, nickel & lead. Japanese spec. JISG-2401, Para 3.2.1, Class A/B/C, Grade A, special no. 1 & 2. To be repeated by another shipment of 10,000 tons. Annual sales potential $2,200,000. Requests C & F Karachi quotations along with tech. data, catalogs & brochures. Reply to A.A.A. Gillani, Prop., Import Export International, P.O. Box 637, 4-A Shabbir Rd., Lahore, Cantonment. Cable GULELALA; tel. 371624.

Motion picture production, distr.

7831—PAKISTAN — Teaching films, 16 mm, color, sound, on various aspects of dissection of human body, brain, eyes, etc., to be exhibited in medical colleges for students. Seeking import on own account & also wishes to rep. U.S. suppliers. Requests f.o.b. & c. & f. (air freight) quotations. Reply to Nazeer A. Syed, Prop., Reezan Trading Co., P.O. Box No. 1, 32 Maclagan Rd., Lahore. Cable SCIENTIFIC, Tel. 68105 or 312612.

Tunisian Firm Seeks Prices, Catalogs Of Consumer Items

The Tunisian firm, Magasin General (MG), wishes to obtain catalogs and price lists of glassware, gift and ornamental items, spray deodorants and toilet preparations, kitchen utensils, small household appliances (220 V only) and stainless flatware. MG wishes to expand its range of sources. Responses should be sent to Fevid Mokhtar, Pres., Magasin General, 24 Ave. de France, Tunis. Telex: STIL-12378-TUNIS.

Iran Notes Policy On Agents

The Government of Iran has requested that the Department of Commerce remind American firms of Iran's policy concerning agents and agents' fees in direct commercial sales of defense articles and services. Agents are neither authorized nor required for the sale of defense articles and services to the Government of Iran, for either direct commercial transactions or transactions conducted through the U.S. Government under the Arms Export Control Act. Any firm desiring to sell such items to Iran should deal directly with the appropriate government offices.

Bolivia Seeks Prefab Housing

The Bolivian Embassy in Washington reports that a bid deadline on supplying 6,000 prefabricated housing units has been extended to April 18. Interested U.S. producers may telex COMIBOL in La Paz for details.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Broad woven fabric mills, wool

2231200 — GERMANY — Apparel fabrics for ladies' outerwear, woven or knitted, printed, made of cotton, synthetics, wool, & blends thereof; widths: 140-150 cm & 90-105 cm, medium to superior quality only. Prices c.i.f. Hamburg or Bremen. Corres. in German if possible. Estab. 1950, supplier to German apparel mfg. firms. Reply by fastest means to— Herr Lauterbach, H.R. Lauterbach, In Den Staemmen 34, 4600 Dortmund-Wellinghoffen. Tel 0231-464619; tx 8227246.

Wood, glass products

2499582, 3231633, 3229138 — UNITED KINGDOM—Wooden and glass novelty and giftware. Principal of co. is AMCIT, presently importing novelties & giftware from Europe. Seeks U.S. lines, especially new items, for sale in U.K. and Europe. Reply to—George Geisinger, Janesco (Exports) Ltd., P.O. Box 90, High Wycombe HP 13 5NU, Bucks. Tel High Wycombe 446926; cable KIMBA HIWYC.

2499582—GERMANY—Gift articles, all kinds. Excl. agency. Desires low to medium priced articles for mass retailing. Annual sales approx dm 10 million, from which commissions are received. Main customers are large retal store buying organizations, dept. stores, chains, wholesale buying groups. Has showrooms & warehousing facilities. Reply by fastest means to—Herr Ringenberg, H. Sommer Handelsvertretungen, Freie Scholle 21, 4600 Dortmund 16. Tel 0231-800966.

2499582, 2499583, 2499588—GERMANY—Wooden housewares, wooden gift articles. Reply by fastest means to—Herr Leo Wallage, Wallage Import-Export B.V., Nyverheidsweg 2, Maarssen (U) Holland. Cable WALMA; Tel 03465-3886; tx 47133.

Converted paper, board products

2649598—NETHERLANDS—Shelf paper. Estab. 1965 & employs 17. Acts as mfr. of wallpaper stripping equipment & importer/wholesaler of do-it-yourself products. Bank reference: Nederlandsche Middenstandbank N.V. Recommended as trading partner. Reply to—M. J. Pril, Dir., Fred Pril Technische Handelmij. B.V., P.O. Box 61, Ijsselstein. Tel 03408-3244.

Synthetic materials

2821000—SWITZERLAND—Plastic resins in granules, plastic molding powders. Reputable, successful distr. of raw materials & intermediates for plastics, paint & lacquer industries. Seeks long term arrangement with U.S. mfr. (will not consider proposals from commission & export agents, & distrib.). Employs 14. Calls on engineers, physicists, buyers in plastics processing industry in Switzerland. Member of Darmstadt-based Roehm group of companies. Solid financial background. Bank. ref. Swiss Credit Bank, 8021 Zurich, or Swiss Bank Corp, 8600 Duebendorf/Zurich. Business strongly recommended. Reply to—J. G. Straehl, Mng.

Dir., Plexacril GmbH Ringstrasse 18, 8600 Duebendorf/Zurich. Cable PLEXACRIL; Tel 01/821 11 44; Telex 54 039.

Metal stampings

3462000—VENEZUELA—Chains for industrial use. Small limited liability co. estab. 1975. Distr. & importer of welding materials & special alloy products; provides sales coverage throughout Venezuela. Acts as excl. distr. of Huntington Alloys, Inc., Huntington, W. Va. Reply to—Augusto Carnero, Dir., Commercial Ca Esur, S.R.L., Apartado 70547, Caracas. Tel 9873368.

3462000, 3315233—ICELAND—Horseshoe calks, forged; horse shoes; horseshoe nails. Recently estab. firm (1976) specializing in importing/distributing sportwear, sporting goods, & horse riding requisites. Employs 6. Quote f.o.b. Norfolk. Contact—Arnar Gudmundsson, Mgr., Astund SF., Haaleitisbraut 68, 105 Reykjavik. Tel 84240.

Construction, mining, materials handling machinery, equipment

3559585 — SWEDEN — Equipment & material for production of thick film, conventional electronics industry. Annual turnover of group approx. $50 million; 50 employees. Reply to Lars-Goran Jensen, W. M. Christensen AB, Box 22, S-150 30 Mariefred. Telex 17894, Tel 0159/106 30.

Special industrial machinery

3559585—BELGIUM—Production equipment to mfr. electronic printed circuits. Private firm sells materials, tools, & equip. to mfr. electronic printed circuits. Reply to—N. Smans, Owner-Mgr., Smans Technical Sales Bureau, Geelsebeen 1A, 2460 Kasterlee. Phone: 014/ 55 53 95.

3559589—HONDURAS—Medicinal pill & tablet-making machinery. Excl. distr. Requests offers ASAP, c.i.f. Puerto Cortes against L/C. Operates important drug store in Comayaguela. Local banking circles report good reputation. Above requested for new drug store located in shopping center of Tegucigalpa. Reply to—Lucy B. de Kurwahn, Mgr., Farmacia San Isidro, 3A. Calle Entre 4 Y 5 Ave., Comayaguela, D.C. Tel 220092.

Electric lighting, wiring equipment

3645723 — UNITED KINGDOM — Table lamps. Mfrs. & imports from U.S. & Canada range of table lamps. Employs 12 with 2 salesmen. Seeks additional supplies of U.S. table lamps to add to present attractive range. Reply to—Mrs. B. Graves, Bushell & Saward Ltd., 58 Dartford Industrial Estate, Powder Mill Lane, Dartford, Kent. Tel (32) 22830.

Radio, television receiving sets

3651205, 3651206—FRANCE—Radio phonograph-tv/recorder combination models; b & w and color for educational use. Estab. 1969. Wholesalers & exporters of industrial meters. Annual turnover 28 million francs. Good credit rating. Regular payments. Employs 100. Bank ref: Credit Lyonnais, Aulnay Sous Bois; Banque Franco-Allemande, 15 Ave. de Friedland, 75008 Paris. Reply to—Jurgen Elsner, Mgr., Z.I. des Mardelles, Rue Blaise Pascal, B.P. 71, 93602 Aulnay Sous Bois, Cedex. Telex 600871; phone 929 22 90.

Communications equipment

3662697—GERMANY — Electronic toys, except coin operated, for use in private homes. Newly estab. distributorship of novelty items for the home. Single proprietorship capitalized at dm 100,000. Bank ref. favorable. Hans-Joachim Kleppe, Hakena-Vertrieb, Obernhofer Strasse 58, 5408 Nassau/Lahn. Tel. 02604-237.

Instruments for measurement, analysis and control

3823000—GERMANY—Continuous process instruments for on-stream gas & liquid analysis (incl. indicators, recorders, controllers, & analysis electrodes); chromatographic analyzers; oxygen analyzers. Major W. Berlin distributor seeks import of above for wholesale trade in W. Berlin. Electrical specifications must meet European standards of 220 volts & 50 hertz. Metric measurement also desired. Quote c.i.f. German port, if possible. Reply to—Herrn Otten, Firma Unin Handel, Bamberger Strasse 28, D-1000 Berlin 30. Tel: (030) 854-47-46.

3823079, 3823077, 3823080—FINLAND—PH measurement systems; Dissolved oxygen measurement systems; turbidity measurement systems; & electric conductivity measurement systems. These on-stream analyzing/measuring type systems are meant for waterworks & industrial application. SLO is Finland's leading firm in high & low voltage equip. from turbogenerators to line hardware & from electronic instruments to radio & tv receivers. Represents Reliable Electric Co., Franklin Park, Ill.; Thomas & Betts Co., Inc., Elisabeth, N.J.; Ansley Electronics, Los Angeles, Calif.; etc. Now seeks descriptive literature, terms of trading & tentative price quotations for potential excl. representation arrangement. Reply to—Harri Piltz, Sahkoliikkeiden Oy (SLO), Pl 88, SF-01301 Vantaa. Telex 12431; tel 90/8381.

Photographic equipment, supplies

3861400 — SWEDEN — Portable thermography cameras. Firm orginally subsidiary of Stachwell Controls Ltd., London. Turnover 1976 approx. skr 10 million. Customers incl. research institutions, universities, hospitals, & pharmaceutical industries. Recommended trade contact. Erik Lennartsson, Saas Insturment AB, Box 42115, S-126 Stockholm. Cable STACHWELL; telex 10335 ELLIOTT S; tel 08/18 80 60.

Costume jewelry, novelties, notions

3964130, 3964121—MOROCCO — Zippers (nylon, aluminum) to be supplied in zipper tape rolls with separate sliders & metal stops, all second choice. Excl. agency & distr. Specializes in braids, trimmings, & products for garment industry. Reply to—Henri Abizmil, Mercerie Abizmil, 26/28 Rue des Oulad Ziane, Casablanca. Phone 22-16-08.

Future Construction Abroad

ALGERIA—State Foods and Cereals Monopoly (S. N. SEMPAC), is seeking prequalifiers for construction of turnkey plant for manufacturing and printing per year of 264 million **cardboard boxes** of various sizes, 287 million small **paper bags,** 50 million **paper sheets** of various sizes. Tender documents available upon payment of DA 200 (US $48.22) from address below. Offer to remain valid 180 days past deadline. French required, all specs metric. Interested firms write no later than April 30 to: Direction Generale, S. N. SEMPAC, 6 Boulevard Sirout Youcef, Algiers.

GUATEMALA—Government about to begin **$33 million highway program** to construct 110 km. new asphalt road, reconstruct 39 km. of existing asphalt road and construct 25 km. of dirt farm to market roads. Prequalifications will be announced in next three months for each of six separate contracts. Firms must be registered with Highway Bureau's Prequalification Commission in order to bid. Registration applications available from Ing. Leonel Aguilar, Jefe, Division Tecnica, Direccion General de Caminos, Finca La Aurora, Zona 13, Guatemala City. IADB has approved $25 million loan to help in financing.

THAILAND — Highway constructors interested in bidding on 17 contracts to build **14 highways** totaling 900 km. at estimated cost of $150 million express interest by March 31 to Director General, Department of Highways, Sri Ayudha Rd., Bangkok. To be awarded in groups during 1977-78, works will include 20 million cubic meters earthwork, 6 million sq. meters of asphalt paving and 11,000 meters bridges. OPIC.

HONDURAS—Government has reopened its invitation to bid on construction of IBRD-financed **road** from La Ceiba to Planes. Companies previously prequalified will not have to do so again. Interested firms obtain bid documents from Ing. J. Roberto Larios, Dir., Direccion General de Caminos, Secretaria de Communicaciones, Obras Publicas y Transporte, Barrio la Bolsa, Camayaguela, D.C., at 150 lempiras (U.S. $75) for each of four sections. Bids are to be opened April 28. OPIC.

EL SALVADOR—Firms prequalified to bid on construction of **expressway** from Comalapa to Zacatecoluca may pick up tender documents at Proveeduria Especifica, Direccion General de Caminos, Ministerio de Obras Publicas, San Salvador, for five rolls helipraphic paper, standard size. Bid deadline April 12.

OMAN—Government, with financial as-

The Overseas Private Investment Corp. (OPIC) offers political risk insurance on assets and bank guaranties to U.S. construction and service firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's contract insurance programs, write Construction Insurance Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-7825.

sistance from World Bank, is building **4 schools:** 2 technical prep schools, teacher training institute, and agricultural training institute. Bid documents for construction expected to be issued in May. Prospective bidders must be registered in Oman as grade I contractors. Registration documents can be obtained from Tender Board, P.O. Box 787, Muscat. Please send copies of correspondence to Ms. Cherie Loustaunau, CAGNE/BIC, U.S. Department of Commerce, Wash., D.C. 20230; 202-377-4441.

IRAN—Government has announced **architectural competition** for design of Pahlavi National Library of Iran. Any architect entitled to practice in own country may qualify by forwarding certificate to that effect and $70 registration fee to Pahlavi National Library Project, International Architectural Competition, Bank Melli Iran, Aryamehr Square Branch, Tehran. Fee may be paid by check or bank transfer to account #1126. Deadline for registration April 19; entries must be submitted by Jan. 20, 1978. Further details available from Cherie Loustaunau, 202-377-4441. OPIC.

JORDAN—University of Jordan is requesting building contractors to prequalify for $10 million **engineering and technology buildings.** International firms must joint venture with Jordanian contractor and return prequalification questionnaire to Purchasing Department, University of Jordan, Amman, by April 30. Please send copies of correspondence to Cherie Loustaunau, 202-377-4441. OPIC.

MOROCCO — Ministere Des Travaux Publics Et Des Communications, Direction de L'Hydraulique, Casier Rabat-Chellah, Rabat, is seeking qualified contractors for construction of **Sidi Driss Dam** on Oued L'Akhadar and a 'dead-end' **canal** which will receive its water supply from intake of the dam. Sidi Driss will be a 40-meter high gravity dam equipped with four bottom outlets crowned with one spillway gate seat. Canal will irrigate Haouz Plain near Marrakech. Closing date for submittal of material April 30. For additional information contact Pete Zantal, CAGNE/BIC, U.S. Department of Commerce, Wash., D.C. 20230; 202-377-4441. OPIC.

Visiting Buyers & Officials

AUSTRALIA — Businessman will visit U.S. in July; interested in contacting manufacturers of **general hospital equipment.** For further information, contact Jim Nader, U.S. Department of Commerce, Room 2322, Washington, D.C. 20230; 202-377-3265.

UNITED KINGDOM — Businessman visiting U.S. in October, seeks contact with manufacturer engaged in printing **books** for use in primary schols, and **company product catalogs.** Contact Jim Nader, 202-377-3265.

JAPAN—Umao Yamaguchi will visit U.S. in May and June to seek **industrial paint equipment and supplies.** Yamaguchi is Osaka Branch Manager of Parker Arrestor Co., Ltd., subsidiary of Japan Parker Rising Co., Ltd., headquartered in Tokyo. Parker Rising, distributor of metal surface treatment equipment and supplies, with capital of $6.3 million and annual sales of $50 million, is already importing from several U.S. companies. Seeks direct import of spray guns, paint supply equipment such as tanks and accessories, and pollution control devices for use in paint shops. For bulky paint shop equipment, would like to arrange licensing agreements for production in Japan. American firms interested in contacting this buyer should mail expression of interest to Shelley Berlin, Foreign Buyer Program, Rm. 2322, U.S. Dept. of Commerce, Washington, D.C. 20230; 202-377-3265.

ZAMBIA—Businessman will visit U.S. late March or early April seeking contact with U.S. manufacturers of **steel nails, mortice locks, and toilet seats.** S. H. Oza, Dir./Buyer for Livingstone Hardware Stores Ltd., Livingstone, is also interested in contacting U.S. suppliers of **water purification chemicals,** specifically chlorine gas and tablets. Livingstone Hardware, a long established firm, is the only supplier of water purification chemicals in Zambia, and is among the country's leading suppliers of hardware and building materials. American firms interested in meeting this buyer contact immediately Shelley Berlin, Foreign Buyer Program, Room 2322, U.S. Department of Commerce, Washington, D.C. 20230; 202-377-3265.

UNDP Country Programs Give Look At Upcoming Projects

At its Twenty-third Session, the Governing Council of the United Nations Development Program approved Country Programs for Burundi, Chile, Colombia, Dominican Republic, Guyana, Haiti, Honduras, Jamaica, Lesotho, Libya, Madagascar, Peru, Philippines and Romania. The programs are 2 to 5-year plans for projects for which the country requests assistance from UNDP. Projects are identified in the report and later emerge as individual trade opportunities.

The Export Information Reference Room of the U.S. Department of Commerce has a limited number of copies of these Country Program reports, available on a loan basis only. To borrow the reports, limited to no more than seven at one time, send a self-addressed label with request to the Export Information Reference Room, Attn: Betty W. Patrick, Office of Export Development, Room 1063, U.S. Department of Commerce, Washington, D.C. 20230. Copies are also available for review at Commerce District Offices in Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Detroit, Houston, Indianapolis, Los Angeles, New York, St. Louis, San Francisco, and Seattle.

Firms and organizations interested in pursuing UNDP projects can subscribe to UNDP Business Bulletin, a free monthly publication that announces project opportunities in connection with subcontracting and equipment procurement. Write The Editor, UNDP Business Bulletin, 345 East 46th St., New York, N.Y. 10017. Also available is UNDP Business Guide, which explains how to participate in UNDP project activities. The Business Guide is also available from Commerce's Export Information Reference Room.

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Dallas, 75242, Room 7A5, 1100 Commerce St. (214) 749-1515.

Denver, 80202, Room 165, New Custom House, 19th and Stout Sts. (303) 837-3246.

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Detroit, 48226, 445 Federal Bldg., 231 W. Lafayette (313) 226-3650.

Greensboro, N.C. 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 378-5345.

Hartford, Conn., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

Honolulu, 96813, 286 Alexander Young Bldg., 1015 Bishop St. (808) 546-8694.

Houston, 77002, 2625 Federal Bldg., 515 Rusk Ave. (713) 226-4231.

Indianapolis, 46204, 357 U.S. Courthouse & Federal Office Bldg., 46 E. Ohio St. (317) 269-6214.

Los Angeles, 90049, Room 800, 11777 San Vicente Blvd. (213)824-7591

Memphis, 38103, Room 710, 147 Jefferson Ave. (901) 521-3213.

Miami, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

Milwaukee, 53202, 605 Federal Office Bldg., 517 E. Wisconsin Ave. (414) 224-3473.

Minneapolis, 55401, 218 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

New Orleans, 70130, Room 432, International Trade Mart, 2 Canal St. (504) 589-6546.

New York, 10007, 37th Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

Newark, N.J., 07102, Gateway Bldg. (4th floor) Market St. & Penn Plaza (201) 645-6214.

Omaha, Neb., 68102, 1815 Capitol Ave., Suite 703A (402) 221-3665.

Philadelphia, 19106, 9448 Federal Bldg., 600 Arch St. (215) 597-2850.

Phoenix, Ariz., 85073, 2950 Valley Bank Center, 201 N. Central Ave. (602) 261-3285.

Pittsburgh, 15222, 2002 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

Portland, Ore., 97204, Room 618, 1220 S.W. Third Ave. (503) 221-3001.

Reno, Nev., 89509, 2028 Federal Bldg. 300 Booth St. (702) 784-5203.

Richmond, Va., 23240, 8010 Federal Bldg., 400 N. 8th St. (804) 782-2246.

St. Louis, 63105, 120 S. Central Ave. (314) 425-3302.

Salt Lake City, 84138, 1203 Federal Bldg., 125 S. State St. (801) 524-5116.

San Francisco, 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave., (415) 556-5860.

San Juan, P.R., 00918, Room 659, Federal Bldg., Chardon Ave. (809) 753-4343, Ext. 4555

Savannah, 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. (912) 232-4321, Ext. 204.

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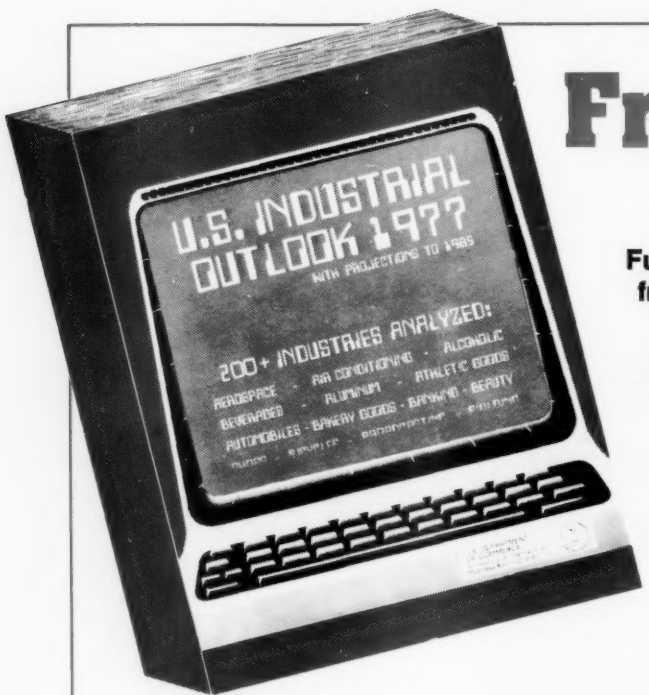
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